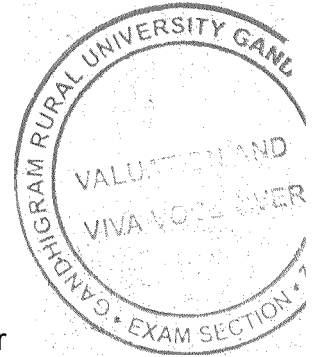


# **KANCHIPURAM SILK MICRO AND SMALL ENTERPRISES CLUSTER A STUDY ON ITS STAKEHOLDERS AND THEIR LINKAGES**

Thesis submitted to  
**GANDHIGRAM: RURAL UNIVERSITY**  
in partial fulfillment of the requirements for  
the award of the Degree of  
**DOCTOR OF PHILOSOPHY**



by

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### **CERTIFICATE**

This is to certify that the thesis entitled **KANCHIPURAM SILK MICRO AND SMALL ENTERPRISES CLUSTER - A STUDY ON ITS STAKEHOLDERS AND THEIR LINKAGES** is the bonafide record of the original research work carried out by Mr.M.K.Badrinarayanan under our supervision and that it has not formed the basis for the award of any degree, diploma or fellowship.



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Place: Gandhigram

Date: 20.12.07

## DECLARATION

I, M.K.Badrinarayanan, hereby declare that the thesis entitled **KANCHIPURAM SILK MICRO AND SMALL ENTERPRISES CLUSTER - A STUDY ON ITS STAKEHOLDERS AND THEIR LINKAGES** is a bonafide record of the original research work carried out by me and that it has not been submitted earlier elsewhere for the award of any degree, diploma or fellowship.

Place: Gandhigram

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(M.K.BADRINARAYANAN)

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## ACRONYMS

1	<b>APEC</b>	Apparel Park for Exports Scheme
2	<b>ASE</b>	Anna Silk Exchange
3	<b>AS I</b>	Archeological Survey of India
4	<b>BDS</b>	Business Development Services
5	<b>CAD</b>	Computer Aided Designing
6	<b>CPC</b>	Centralised Purchase Committee
7	<b>CSB</b>	Central Silk Board
8	<b>CSTRI</b>	Central Silk Technology and Research Institute
9	<b>DDH</b>	Deputy Director Handlooms
10	<b>DHT</b>	Directorate of Handlooms and Textiles
11	<b>DIC</b>	District Industries Centre
12	<b>GI</b>	Geographical Indication
13	<b>IGCAR</b>	Indira Gandhi Centre for Atomic Research
14	<b>IIHT</b>	Indian Institute of Handloom Technology
15	<b>KSMB</b>	Karnataka Silk Marketing Board
16	<b>MFI</b>	Micro Finance Institution
17	<b>MSME</b>	Micro Small and Medium Enterprises
18	<b>NABARD</b>	National Bank for Agriculture and Rural Development
19	<b>NGO</b>	Non Governmental Organisation
20	<b>NID</b>	National Institute of Design
21	<b>SCTH</b>	Silk Conditioning and Testing House
22	<b>SUP</b>	Scheme for Integrated Textile Parks
23	<b>swes</b>	Silk Weavers (Production and Marketing) Cooperative Society
24	<b>SWMS</b>	Silk Weavers Marketing Cooperative Society
25	<b>TANSILK</b>	Tamilnadu Cooperative Silk Producers Federation limited
26	<b>TCIDS</b>	Textile Centre Infrastructure Development Scheme
27	<b>THDC</b>	Tamilnadu Handloom Development Corporation
28	<b>TZL</b>	Tamilnadu Zari Limited
29	<b>WSC</b>	Weavers Service Centre
30	<b>XRF</b>	X Ray Fluorescence testing
31	<b>ZTC</b>	Zari Testing Centre

## ABSTRACT

Kanchipuram Silk has a historical lineage dating back to the early history of South India from the period of Pallavas. Being a temple city and having been the capital city of various rulers of South Indian dynasties the silk handloom weaving industry has prospered here well with royal patronage and the weavers have enjoyed a high pedestal in the social hierarchy.

Cooperative movement has gained footing in Kanchipuram in the pre-independence era and also has to its credit of being a self-initiated process. In the post-independence period too, the cluster has received continuous attention from the government. The number of cooperatives and their membership has seen a growth and various schemes benefiting the cluster have been initiated. Many technical and support institutions have chipped into the cluster at various points of time to provide assistance through

- various schemes and boost the competitiveness of the cluster.

Though there are many Cooperatives functioning at Kanchipuram, a very few are run profitably. Declining membership, erosion of share capital, decline in sales and production are some common features observed across Cooperatives. Only a very few Cooperatives have been able to continue welfare measures like cash advance and bonus. The market segmentation analysis provides a clear concentration of market for the cluster products in Tamilnadu. *Loom World* showrooms are emerging as a ray of hope for the weaver Cooperatives to fight against the bogus cooperatives.

The cluster has thousands of weavers in its principal production system working predominantly under two major systems viz., Cooperatives or master weavers. A very few are working independently. The younger generation weavers are conspicuous by their absence, with the scenario being dominated by middle and old aged weavers. This indicates a danger to the survival of weaving art in the forthcoming years. While the

- Cooperatives provide a complete support in terms of production and marketing, the private master weavers provide limited support to the weavers in terms of production and marketing. The wages earned by weavers of Cooperatives are higher per piece of weave, due to the welfare orientation of the Cooperatives.

Product diversification and technological upgradation are very rare phenomena in the cluster. Though formal training is imparted by agencies like Weavers Service Centre to the weavers and Central Silk Board to the master weavers, the technology adoption rate is found to be very low. The Chennai-based textile retail majors like Pothys, RmKV, Chennai Silks, etc., are emerging as an important channel of sales to the weavers. Informal sources seem to dominate the major source of finance for weavers and master weavers. Among weavers, micro finance is emerging as a substitute to the usurious moneylenders.

Escalating cost of raw materials, especially zari, looms up as the ' major problem in production followed by issues like problems of working

capital, increasing use of fake zari, low wages, etc. The increasing cost of finished goods, due to the hike in the cost of inputs, looms as the top problem in marketing followed by increasing influx of silk fabrics with fake zari, unfair trade practices like selling the products of other origins in the brand name Kanchipuram, malpractices by intermediaries, lack of advertising and availability of cheaper substitutes.

The results of regression analysis indicates that the variables - actual output per year, number of family members involved in the enterprise and days of employment influenced the dependent variable i.e., weavers income.

- The analysis of variance results indicate that there is a significant difference among the weavers working under different systems in terms of number of looms under operation, actual output per year, wages earned, number of family members involved in the enterprise, major sources of financing viz., own sources, cooperatives, master weaver, moneylenders and microfinance.

The analysis of the cluster linkages reveals that the linkages of principal firms with the BDS providers are weak. There are also issues which call for attention from policy perspective like regulation of competition, creation of a conducive environment for business, etc. There is a need for product diversification which is possible only when the linkages among the stakeholders are strengthened. The cluster cooperation matrix has identified potential areas for development of linkages and social capital.

The analysis of competitive advantage differences reveals that among Cooperatives, there is a need to monitor cost of production, invest in technology and services. The diamond of competitive advantage analysis

- has indicated the various areas of concern for developing the competitive advantage of the cluster. The analysis of knowledge management has highlighted the issues in knowledge transfer, the need to preserve the knowledge and the strategies for facilitating transfer of knowledge.

The inferences from Venn diagram analysis reveal that though there are various important support institutions present in the cluster, their linkages with the principal producers are weak. Hence there is a necessity to bridge the gap between the support institutions, BDS providers, financial institutions and the forward linkages with that of the principal production system to boost the competitiveness of the cluster.

The detailed SWOT analysis on the aspects of technology, innovation, markets, inputs, skills and business environment, identifies the potential areas of opportunity and strengths which can be harnessed to tap the same, for the benefit of the cluster.

Based on the analysis and findings the suggestions have been classified under five specific heads viz., overall cluster development, production, marketing, finance and human resource development. A cluster map portraying the envisaged cluster linkages has been presented, highlighting the roles of new institutions like Cluster Development and Coordination Committee and Cluster Consortia. Also a logical framework specifying the vision, objectives and activities to be taken up for the cluster development has been furnished.

## Chapter 1

### INTRODUCTION

Clusters, whether industrial or micro-enterprises, have found a great favour among policy makers, both in developed and developing economies. More than 50 countries have their cluster initiatives in place across the globe. India has probably more independent cluster initiatives than any other country in the world, thanks to the sudden spurt in interest since the year 2000.

In this chapter, first section provides an understanding of clusters, their typology, international understanding of clusters and the significance of clusters for the Indian economy. The second section presents the overview of Indian textile industry and handloom sector. The third section gives a brief insight into the Kanchipuram Silk Weaving MSME cluster.

#### *Section 1: Clusters - Meaning, Typology and international scenario*

Clustering of enterprises as a phenomenon is found to exist both in economically developed and developing countries. Geographical proximity among each other gives rise to specialized labour, nurtures subsidiary industries, stimulates innovative activity, enables technological spill-over and makes the economic and non-economic inter-firm linkages feasible. Such a form of industrial organization is also known as industrial clusters or industrial districts.

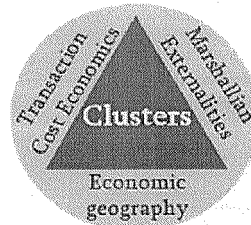
An industrial cluster is a set of industries related through buyer-supplier relationships, or by common technologies, common buyers or distribution channels, or common labour pools. Such a relationship leads to improved efficiency and international competitiveness of the micro, small and medium enterprises (MSMEs) on account of the economies of scale and scope. (Porter 1990)

In 1970, Alfred Marshall used the expression industrial districts while remarking that industries tend to concentrate in specific geographical areas. Marshall mentioned straw plaiting in Bedfordshire or cutlery in Sheffield. Industrial districts are an instance of the dictum that the whole is more than the sum of its parts. A cluster of competing and complementary firms, local

institutions and shared values has more to offer on the international arena than the very same firms taken in isolation. Clustering, thus leads to collective efficiency gains, which individual firms can hardly achieve.

**Fig.1.1**

**Overall Conceptual Framework of clusters**



Overall conceptual framework of clusters

Source: Adopted from Matopoulos (2005)

The international interest in the emergence and growth of SME clusters in 1990s has been fuelled by the success stories of Italian industrial clusters or what has come to be called as the Third Italy'. The concept of the Third Italy came up in the late 1970s. It referred to the north-eastern and central Italy, which witnessed fast growth, compared to the north-western (First Italy) and the poor southern part of the country (Second Italy).

In both industrialised and developing countries, there are increasing evidences that micro, small and medium enterprises (MSMEs) can boost their competitiveness through networking and that this process is easier and more sustainable if the firms are situated and work very closely with one another in "clusters". UNIDO defines cluster as follows

*A cluster is a sectoral and geographical concentration of MSMEs, faced with common opportunities and threats. Such a configuration can:*

- *Give rise to collective benefits, for example through the spontaneous inflow of suppliers of raw materials, components and machinery or the availability of workers with sector specific skills*
- *Favour the creation of providers of specialized technical, administrative and financial services*
- *Create a conducive environment for the development of inter-firm co-operation as well as of co-operation among public and private institutions to promote local production, innovation and collective learning.*

Among such firms, geographic proximity can encourage the development of intensive business relations. The firms producing the product by which a cluster is known are called principal firms. The number of principal firms can vary widely. In Austria, a successful wood cluster exists with less than a dozen firms. The knitwear clusters of Prato in Italy and Tirupur, India, on the other hand, have 9000 firms. In clusters with a small number of principal firms, the firms tend to be fairly large. Large clusters, with 1,000 or more firms, tend to be clusters of very small manufacturing firms. But there are many exceptions to the size rule: the Austrian wood cluster mentioned above consists of small firms. The broad product category of the principal firms covers a range of individual products. Each firm specializes in any one or a combination of these products.

The principal firms are interconnected with a range of supporting firms through backward and forward linkages. These include:

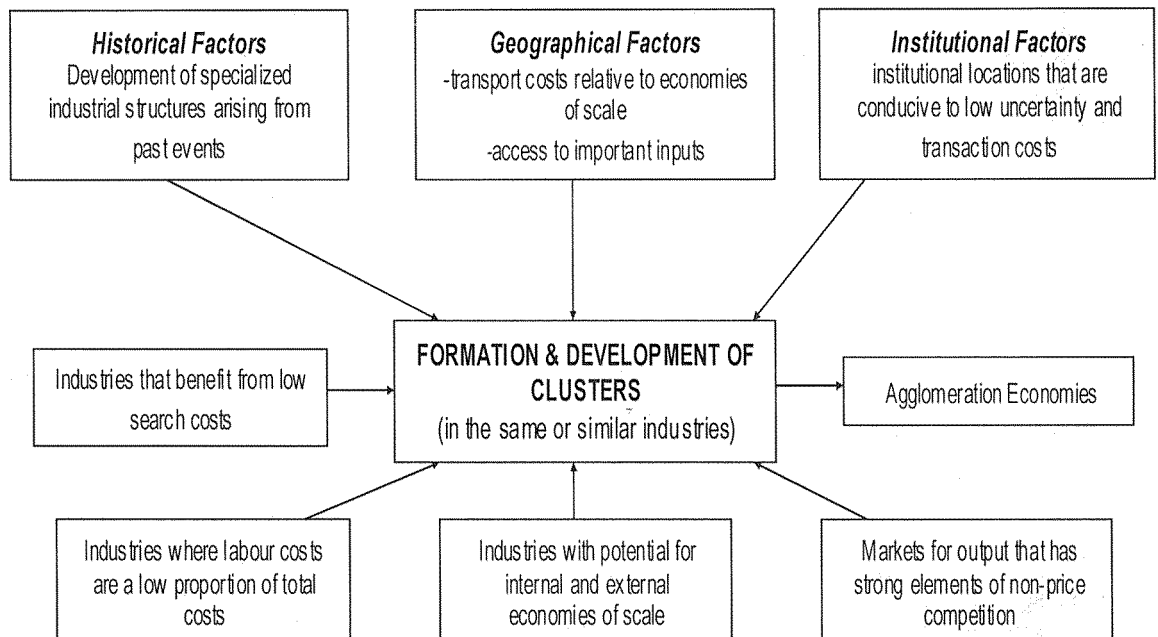
- Raw material suppliers and manufacturers of parts and machinery;
- Intermediary buyers like traders, exporters and import agents;
- Technical and financial service providers like consultants on quality, environment, design, energy, investment etc.

Various technical/financial institutions (both private and public) and interest groups such as product level and umbrella associations/forums also contribute towards the dynamics of the cluster. All these - principal firms, support firms and service providers, technical and financial institutions and interest groups are a part of the cluster and are called cluster stakeholders (also actors). The cluster stakeholders share a business relationship among themselves. Such a relationship is generally very intense in a cluster in a small geographical area - a village, town or district. These intense business relationships may also branch into surrounding villages/districts. A cluster is identified by its place of major concentration. In short, a cluster derives its name from two dimensions - product and place.



Fig.1.2

Formation and Development of clusters



Gulati (2001)

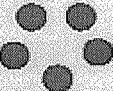

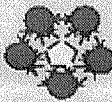
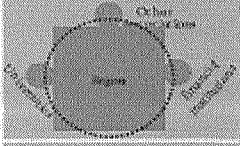
What is not a “cluster”?

Abstracting from the case of extremely small economies, a cluster should normally not be equated with the entire manufacturing sector nor with sectors thereof (e.g. the whole textile or leather industry in the country): sectors, while facing the same threats and opportunities, are generally too dispersed for the stakeholders to be connected in an intense web of interactions. The problems and opportunities of an industry or sector are broader in nature though they are often very much related to those of a particular cluster within the sector.

Again, networks (that is groups of enterprises cooperating with each other) are very important stakeholders in most clusters, but the network concept is much narrower, the cooperation is more focused on specific action(s) in a network. A cluster can have many networks, and these may serve as building blocks in cluster development.

An enterprise can of course leave a cluster, but will find that severing the intensive relationships with the other entities in the cluster, which often goes beyond a pure business relationship, may require a radical reorientation.

**Table 1.1**  
**Business Activity and Formations**

<b>BUSINESS FORMATION</b>	<b>FIRMS</b>	<b>CHAINS</b>	<b>NETWORKS</b>	<b>CLUSTERS</b>
<b>FACTOR</b>				
<b>MEMBERSHIP</b>	None	Closed, mainly stable	Open, membership based	None required
<b>RELATIONSHIP</b>	Adversarial	Sequential	Reciprocal	Cooperative and competitive
<b>BASIS FOR AGREEMENT</b>	Strictly contractual	Mutual arrangements, contract based or not	Majority determination	Social norms and reciprocity
<b>VALUE ADDED</b>	Individual value	Focus on core competencies	Aggregates & organizes demand for services	External economies
<b>MAJOR OUTCOMES</b>	Autonomy	Increase sales/profits & cost reductions	Shared resources, lower costs, benchmarking	Information & knowledge sharing
<b>BASIS OF EXTERNAL ECONOMIES</b>	None	Co-ordinated functions & resources	Membership	Location / proximity
<b>SHARED BUSINESS GOALS</b>	None	Business outcomes	Collective vision	None

Business activity and formations

Source: Adopted from Matopoulos (2005)

Moreover, MSME clusters are environments where it is easier and more effective to implement support initiatives to enlarge the production base, to identify new markets, to trigger growth, to create new employment opportunities and address regional economic imbalances.

However, only a handful of MSME clusters in the world are truly performing ones, where the above advantages can be readily observed. On the contrary, the largest number of MSME clusters is “underachiever”. In such clusters the advantages (as described above) fail to emerge. The cluster development approach sees the key problem faced by MSMEs as one of relative isolation rather than size. Isolated enterprises are unable to achieve economies of scale, lack negotiating power, find it difficult to specialize and have limited access to credit, strategic information, technology and markets.

Enterprises, especially small and micro ones, can significantly increase their comparative advantage by co-operating with one another and building linkages with private or public service providers. They can thus build their competitive strength through cost reduction, value chain up-gradation, and utilization of collective economies of scale. Cluster development focuses on reducing the isolation faced by MSMEs by strengthening the linkages among all key cluster stakeholders (that is other MSMEs, large enterprises, support institutions) to co-ordinate actions and pool resources for a common development goal. In other words, the cluster approach views a cluster not merely as a concentration of micro and small firms, but as an inter-dependent network among the firms as well as between firms and raw material suppliers, equipment suppliers, subcontractors, support institutions, customers and service providers.

#### **Benchmarks to define a cluster:**

There are no universal or even national benchmarks to define a cluster. However in India, United Nations Industrial Development Organisation (UNIDO) Cluster Development Programme has worked on some assumptions to estimate the number of MSME (Micro, Small and Medium Enterprise) clusters. An industrial cluster is considered to be one that has 100 or more registered enterprises. As against this, even the presence of 50 handicraft enterprises is considered to be significant for a handicraft cluster. In case of a handloom cluster, there should at least be 500 handlooms in a given location.

#### **Typology of Clusters:**

The typology of clusters as specified by UNIDO is given below:

- *Industrial and artisan clusters* - An artisan cluster is characterized by the predominance of household based enterprises. Such enterprises use personal skills of the artisans to production, rather than electrically driven machinery. They are predominantly run by the family labour both in production and management of the enterprise. An industrial cluster may also have some household enterprises but is characterised by

predominance of small and medium industrial enterprises with hired labourers. Artisan clusters may generally produce either handicraft or handloom products.

- *Natural and Induced clusters* - A natural cluster evolved in the past due to local availability of raw material, skill or market demand. Most of the clusters known in India are natural clusters. Such clusters may have been in existence for several decades and at times for centuries. On the other hand, MSMEs of similar kind can also come up at a location due to specific investment policy or public provision of specialised infrastructure. These public measures can lead to creation of new clusters and therefore referred to as induced clusters.
- *Small and large clusters* - this classification is based on volume of business, geographical area of spread or employment generation. There is no publicly defined benchmark to designate a cluster either as large or small. However, in the Indian national context, UNIDO has categorised the industrial clusters into 5 categories depending on their likely volume of business and estimated number of employment generated. Such a categorisation has not known to be undertaken in case of artisan and service clusters so far.
- *Vertical and horizontal clusters* - A vertical cluster consists of one or a few large enterprises and a large number of other small supplier enterprises. On the other hand, a horizontal cluster consists of a large number of SMEs (often in hundreds) that may produce and market directly while competing with one another. The SMEs in horizontal clusters may however have other supplier firms in the same clusters.
- *Exporting clusters* - the clusters that have their primary markets abroad can be called as exporting clusters.
- *Dynamic clusters* - clusters that have demonstrated a high degree of vibrancy and high growth in the recent past

There are various other classifications of clusters based on the contexts in which they operate, levels of business linkages, potential for growth, etc.

Fig.1.3

**Bianchi's SMEs/Cluster Typology based on their relation with production and markets**

Market Relations			
Production relations	<i>Local</i>	<i>National</i>	<i>International</i>
<i>Local</i>	Local-Local	Local-National	Local International
<i>National</i>	National-Local	National-National	National-International
<i>International</i>	International-Local	International – National	International-International

Source: Gulati M. 2001

The above figure presents a new typology of SMEs and their clusters based on their levels of relations with production and markets. The thickness of lines represents the various possible options for the development path of the clusters. There are several other ways to describe the clusters depending upon the purpose.

The Kanchipuram Silk Weaving cluster has the features of both natural and artisan cluster having a principal production system dominated by Micro and Small Enterprises. The production relations of Kanchipuram cluster are 'Local - National'.

### Cluster Growth Stages

Clusters are like any other organic entities and cluster academicians have patterned the cluster evolution into stages of birth, growth, maturity and decline. The time length of each stage however very much depends on the external factors and intrinsic potential of the cluster. The size of a cluster,

extent & nature of inter-firm rivalry, degree of cooperation, existence of specialised service providers, existence of representative institutional structure and linkages with demanding markets are known to be some of the significant influencing factors that can be related to the growth of a cluster.

**Table 1.2**  
**Sectoral approach vs. Cluster-based Approach**

Sectoral approach	Cluster-based approach
• Groups with similar network positions	• Strategic groups with mostly complementary and dissimilar network positions
• Focus on end product industries	• Include customers, suppliers, service providers & specialized institutions
• Focus on direct & indirect competitors	• Incorporate the array of interrelated industries sharing common technology, skills, information, inputs, customers and channels
• Hesitancy to co-operate with rivals	• Most participants are not direct competitors, but share common needs and constraints
• Dialogue with government often gravitates towards subsidies, protection and limiting rivalry	• Wide scope for improvements in areas of common concern that will improve productivity & raise the plan • A forum for more constructive and efficient business government dialogue
• Looking for diversity in existing trajectories	• Looking for synergy and new combinations

Traditional sectoral versus cluster-based approach, Source: Adapted from Porter (1997)

### **Clusters in India, their typology and their economic significance**

Clusters have historically played a significant role in sustaining economic growth in India. According to the available estimates, 388 SME and 6,000 micro & artisan enterprise clusters exist in India. Besides contributing to significantly large employment, these clusters also contribute up to 60 % of India's manufactured exports. As per the typology given before, clusters are classified as industrial (SMEs), micro-enterprise, handlooms, handicrafts and service oriented. However, while some estimates have recently been worked out for the manufacturing type of clusters, no work has been done to estimate the service oriented clusters that are beginning to gain a great degree of importance in the Indian economy.

For the count of SME clusters, there are two different estimates from two sources using different parameters. UNIDO Cluster Development Programme

has estimated the number of SME clusters with support drawn from the various district level institutions, both public and private. A concentration of more than 100 registered small-scale units (excluding household/micro units) manufacturing same or similar products make up a cluster as per the parameters used to collect the information.

However, a few clusters with less than 100 units, but more than 50 units, but at least an aggregate annual turnover of Rs 10 crore (\$ 2.2 million) have also been included in the list of clusters. Service sector and handicraft/artisan sector have been ruled out under this. For the purpose of data compilation plantation and quarrying are also excluded.

The second estimate is drawn up based on the national census on small industries undertaken by the national Ministry of Small Scale Industry. As per the census there are 2,042 urban and rural industrial clusters, as per the definition of small-scale industry that includes all enterprises with a capital investment of Rs. 1 crore (US \$ 220,000 approx) and below. As per these parameters, those clusters have 1.5 million enterprises and employ 4.4 million persons and generate an output of Rs 422 billion (US \$ 1 billion).

The table given below gives different estimates of the SME Clusters in India:

**Table 1.3**  
**SME (Industrial) Clusters in India**

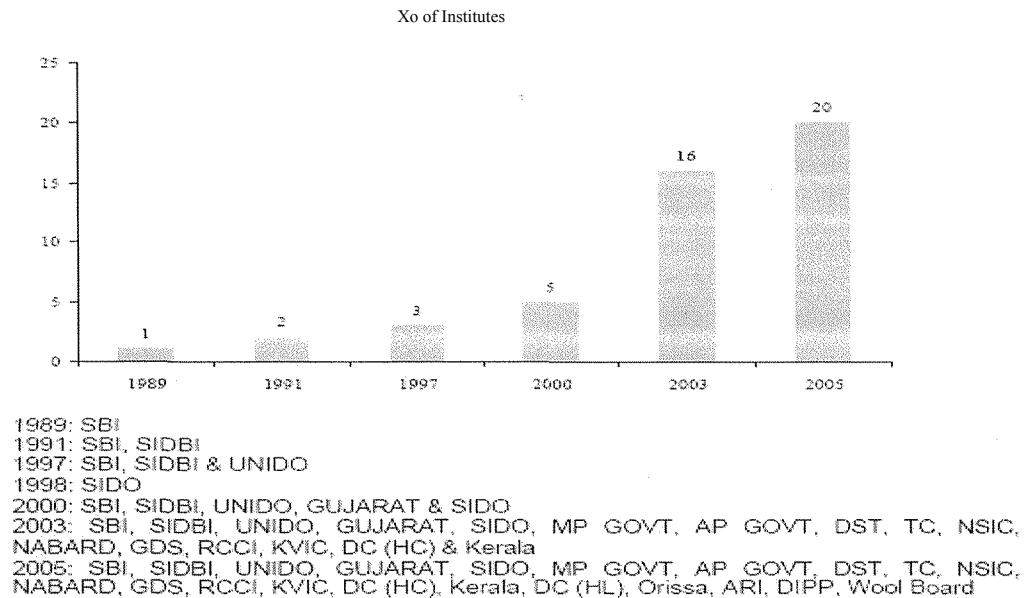
VARIABLES	DC (SSI)	UNIDO
No. of Clusters	2042	388
No. of Units	1,535,357	490,000
Employment (No.)	4,392,256	7,500,000
Output (Rs. Mn)	421,690.04	1,570,000.00

Source: Go (2004) and UNIDO

About 2960 handicraft clusters operate in India, which cover 18 broad product groups. In the case of handicraft, heaviest concentration of clusters is in the textile sector with 709 clusters; followed by basketry, mat weaving and cane articles 406; woodwork 358; metal ware 317; earthenware 252; jewellery 155; leather 128; folk painting 105; stoneware 94; toys and dolls 91. The product composition overlaps in some of the 372 handloom clusters as most of these clusters produce more than one product. However, in all, the handloom clusters

broadly manufacture 23 specific woven products like dhoti, saris, durries(floor mattings), gamchhas (shoulder cover), bed sheets, bed covers, pillow covers, napkins, table mats, curtains, etc.

**Fig.1.4**  
**Institutions Undertaking Cluster Development Initiatives**



Source: UNIDO.

### **Cluster Development in India - A Perspective:**

With most of the cluster initiatives having begun only after the year 2000, they are at a nascent stage in India. The approaches and methodologies are still evolving and are far from perfect. UNIDO has done some pioneering work in this regard and its cluster development programme is one of the earliest in the country. Government of India through the Ministry of SSI and Ministry of Agro & Rural Industries has introduced the 'Industrial Cluster Development Scheme' to promote and provide financial support for cluster development to be taken by in-house as also external institutions.

Even before UNIDO took up the cluster development initiative, two major initiatives were taken up to develop clusters. The first was taken up by State Bank of India (SBI) under the aegis of SBI Project UPTECH way back in 1988-



89. Under the Project UPTECH, SBI identified agro pump-set industry cluster in Coimbatore, diesel engine cluster in Kolhapur, huller rice mills cluster in Palghat (Kerala), foundries cluster in Agra, glasswork cluster in Firozabad and auto component cluster in Pune for its intervention.

The Small Industries Development Bank of India (SIDBI) also took up cluster development initiative in 1991. Like SBI, SIDBI also focused on technology upgradation and not on developing networking and co-operation among the SMEs. SIDBI took up the development work in 20 clusters spread across the country. A group of technical experts were roped in, who identified and helped units to develop their technology modernisation plans. Subsequently, these plans were submitted for funding to the respective state financial corporations (SFCs) and commercial banks.

Almost 35 ministries and national and international organisations of repute are directly involved in cluster development activities, either as implementing agencies or as agencies undertaking research on clusters or monitoring and evaluating the impact of cluster interventions or funding cluster development activities, or carrying out a combination of these activities. Apart from UNIDO, the International Labour Organisation is the other international agency that has started working in this area recently.

The Government of India is deeply involved in the development of clusters. The specific ministries involved are the Ministry of Small Scale Industries (through the Office of the Development Commissioner Small Scale Industries) and Ministry of Textiles through the four offices of the Development Commissioners of Handlooms, Handicrafts, Textile Committee and the Central Wool Board; Khadi & Village Industries Commission; National Small Scale Industries Corporation; Coir Board; NABARD, SIDBI; National Institute of Fashion Technology; National Institute of Small Industry Extension and Training; Central Glass and Ceramic Research Institute; etc. There are also the national non-government organisations like Infrastructure Lease & Financial Structure and Indian Machine Tool Manufacturers Association that are engaged in financing and implementation of cluster related projects.

State governments like Gujarat, Kerala, Andhra Pradesh, Madhya Pradesh, Orissa and Rajasthan have also initiated cluster development activities in a big way. There are a few technical consultancy organisations involved like Andhra Pradesh Technical Consultancy Organisation, Maharashtra Industrial and Technical Consultants; and an NGO viz. Indian Institute of Rural Development, Rajasthan that are also engaged in implementation of cluster development programmes. These organisations and agencies have so far covered 1037 clusters (both artisan and industrial).

While several organisations have taken up UNIDO approach for development of clusters, some of the organisations have either carried on with the ongoing methodologies or evolved new variations with a different focus.

#### **Cluster development in the post-liberalization era**

In the pre-liberalisation era, the entire responsibility of developmental and promotional activity laid with the government. The government was expected to drive economic development through policy decisions. Post-liberalisation, the role of the government has shrunk and it is increasingly being limited to facilitating development (see the figure below). Now, with the changing environment, the private sector is expected to shoulder a lot of responsibilities. With further economic development, more and more stakeholders shall be involved in sharing the burden of conceptualisation of cluster initiatives, funding of the cluster activities and managing of common facilities that may form an important part of the cluster initiatives.

#### **Key areas of concern for Cluster Development in future**

Some of the key areas of work that require policy attention are

- Facilitation of infrastructure in clusters and strengthening of industry associations in the clusters along with their integration with regional, sectoral and national level associations.
- Twinning of clusters for mutual cooperation among them is another promising area of work.
- Fostering investments across clusters within the country and from abroad is another area that has a good potential.

## **Section - II**

### **OVERVIEW OF INDIAN TEXTILE & HANDLOOM INDUSTRY**

The textile industry occupies an important position in the Indian economy, contributing significantly to industrial production, employment generation and foreign exchange earnings. At present, it contributes to about 14 per cent of industrial production; and accounts for approximately 4 per cent of GDP. This sector provides direct employment to about 35 million people; particularly contributing to employment generation in the rural and remote areas of the country on account of its close linkage with agriculture.

The textile industry contributes to about 21% of the country's export earnings. As the industry is well established across the value-chain, from raw material to high value added products, its growth and development is bound to have a significant impact on the economy.

The Indian textile industry is extremely complex and varied: with hand-spun and hand-woven sector at one end of the spectrum and the capital-intensive sophisticated mill sector at the other; with the decentralized power loom and knitting sectors coming in between. The industry makes use of natural fibres (like Cotton, Jute, Silk and Wool) as well as synthetic/manmade fibre (like Polyester, Viscose Nylon, Acrylic and their blends).

As anywhere in the world, the culture and tradition over the years had, had their major influence on the industry. With a population that has people speaking 22 languages, with their local tradition and cultural variants, the variety of requirements that is placed on the Indian textile industry is almost of every hue and highly colorful. The complex and varied structure of the industry, coupled with its close linkage to the ancient culture and tradition of the Indian people, provides it with the unique capacity to produce, with the help of latest technological inputs and design capability, a wide variety of products suitable to the varying consumer tastes and preferences, both within the country and overseas.

The Indian textile industry has been remarkably resilient over the years. Its manufacturing capacity was estimated at 39.03 million spindles (2002-03); with increasing thrust towards open end rotors and setting up of 100% Export Oriented spinning units. The production of spun yarn is estimated at 3221.37 million kg (2004-05); with 100% non-cotton yarn showing an increasing trend (2004-05 growth rate - 10.4%) at 377.31 million kg (2004-05). The production of cloth (including mill, powerloom, handloom and khadi, wool and silk) for 2004-05 is estimated at 42,383 million sq.mt; with the contribution from the decentralized powerloom sector being 28,803 million sq.mt. The per capita domestic availability of cloth in the country during 2004-05 is provisionally placed at 31.89 sq.mt.

**. Table 1.4**  
**OVERVIEW OF TEXTILE INDUSTRY**

ITEMS	UNITS	1999-2000	2000-01	2001-02	2002-03	2003-04
Cotton/Man-Made Fibre Mills	No.	1850	1846	1860	1875	1787
Textile Mills						
Spinning mills (Non-SSI)	No.	1565	1565	1579	1599	1564
Composite mills (Non-SSI)	No.	285	281	281	276	223

Spinning mills (SSI)	No.	921	996	1046	1146	1135
Exclusive Weaving mills (Non=SSI)	No.	202	203	207	209	206
Powerloom units	Lakh No.	3.67	3.74	3.75	3.8	4.13

<i>Capacity Installed</i>	UNITS	1999-2000	2000-01	2001-02	2002-03	2003-04
Spindles (SSI + Non-SSI)	Million No.	37.08	37.91	38.33	39.03	37.03
Rotors (SSI + Non-SSI)	Lakh No.	4.44	4.54	4.8	4.68	4.82
Looms (Organised sector)	Lakh No.	1.4	1.4	1.41	1.37	1.05
Powerloom	Lakh No.	16.3	16.62	16.66	16.93	18.37
Handlooms	Lakh No.	38.91	38.91	38.91	38.91	38.91
Man-Made Fibres	Million kg.	1066	1081	1090	1096	1101
Man-Made Filaments	Million kg.	1078	1128	1135	1191	1228
Worsted spindles (Woollen)	'000 Nos.	585	598	598	504	504
Non-Worsted spindles (Woollen)	'000 Nos.	419	426	426	437	437

Production of Fibres	UNITS	1999-2000	2000-01	2001-02	2002-03	2003-04
Raw cotton*	Lakh bales	156	140	158	136	177
Man-Made Fibres	Million kg.	835	904	834	914	953
Raw Wool	Million kg.	47.9	49.2	50.7	50.7	50.7
Raw Silk	Million kg.	15.21	15.86	17.35	16.32	15.74

Production of Yarn	UNITS	1999-2000	2000-01	2001-02	2002-03	2003-04
Cotton yarn	Million kg.	2204	2267	2212	2177	2121
Other spun yarn	Million kg.	842	953	889	904	931
Man-made filament yarn	Million kg.	894	920	962	1100	1118

Fabric Production	UNITS	1999-2000	2000-01	2001-02	2002-03	2003-04
Cotton	Million sq.mtr.	18989	19718	19769	19300	18040
Blended	Million sq.mtr.	5913	6351	6287	5876	6068
100% Non-cotton (including Khadi, Wool & Silk)	Million sq.mtr.	14306	14164	15978	16797	18275
Total	Million sq.mtr.	39208	40233	42034	41973	42383

**Per capital availability of cloth**

Per capita availability of cloth	Sq.mtrs.	30.55'	30.68	31.97	31.37	31.01
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**Textile Exports & Imports**

Exports (Including Jute, Coir & Handicrafts)	US \$ in Mn.	10521.28	12014.44	10801.04	12444.94	13194.35
Imports	US \$ in Mn	1128.59	1172.4	1537.1	1645.48	2021.96

*Note: Source of Export/Import data from DGCI&S, Kolkata Compendium of Textile Statistics, 2004*

**Table 1.5**

**EXPORTS FROM INDIAN TEXTILE INDUSTRY**

(Rs. in Million)

Sl. No.	Item	2002-03	2003-04	April-Jan'04-05
1	Cotton Raw Incl. Waste	502.8	8114.67	2763.89
2	Floor Covering of Jute	1224.48	1432.5	1748.8
3	Other Jute Manufactures	2220.04	2976.5	1981.58
4	Jute Yarn	2140.11	2306.04	2672.41
5	Jute Hessian	3493.1	3965.26	3512.91
6	Manmade Staple Fibres	2205.72	2766.13	2493.21
7	Cotton Yarn, Fabrics & Madeups	162174.9	152758.74	120026.96
8	Natural Silk Yarn, Fabrics & Madeups	15043.5	16986.58	14691.73
9	Manmade Yarn, Fabrics & Madeups	66393.73	80753.51	70100.14
10	Wollen Yarn, Fabrics & Madeups	2464.34	2716.68	2476.31
11	RMG of Cotton including Accessories	215100	213840.5	166068.31
12	RMG Silk	6640.14	7510.65	6534.2
13	RMG Wool	10570.86	13746.46	14136.51
14	RMG Manmade Fibre	35203.2	34264.34	26162.58

15	RMG of Other Textile Material	7850.74	10408.76	8931.91
16	Coir & Coir Manufactures	3550.04	3604.36	3818.54
17	Carpets (Excluding silk) Handmade	19407.61	24952.98	21734.95
18	Handicrafts (Excluding Handmade Carpets)	38006.35	20324.61	12524.69
19	Carpets (Excluding Silk) Mill Made	5406.13	0	0
20	Silk Carpets	961.28	1216.33	805.72
21	Silk Waste	157.65	51.58	19.81
	<b>Total Textiles Exports</b>	<b>600716.8</b>	<b>604697.18</b>	<b>483205.14</b>

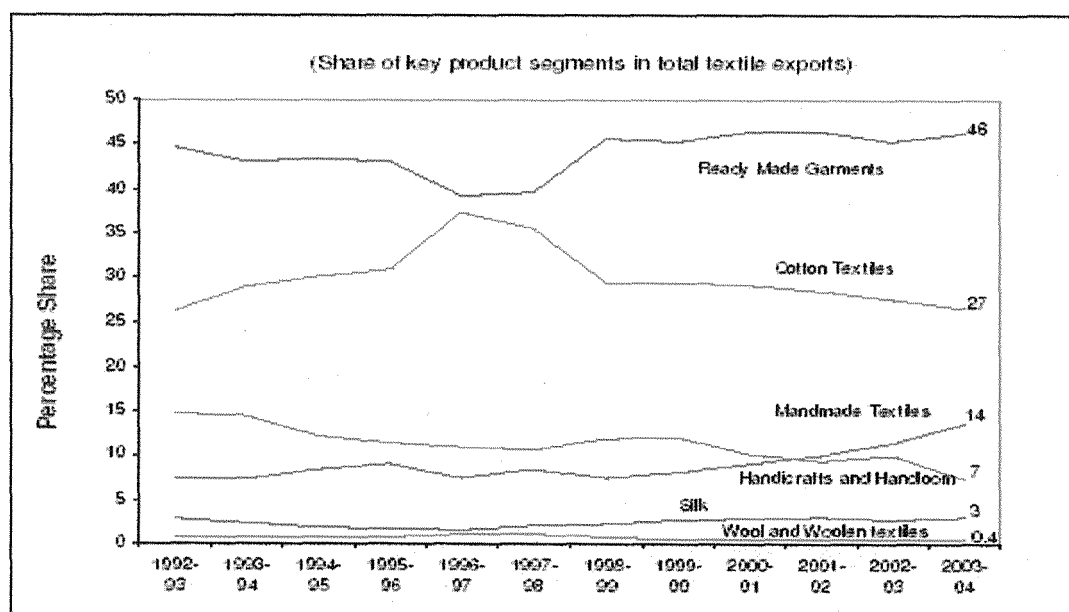
	<b>Total Exports</b>	<b>2551373</b>	<b>2915819.3</b>	<b>2854131.54</b>
	<b>% of Textile Exports to Total Exports</b>	<b>23.54</b>	<b>20.74</b>	<b>16.93</b>

Source: DGCIS, Kolkata

P - Provisional

Textile exports constitute about 21% of India's total exports. Ready made garments and cotton textiles form the major part of textile exports.

Fig.1.5



Source: Ministry of Textiles

### Changing Global Scenario - ATC

Till 31.12.1994, the exports of textiles to certain developed countries (US, EU member countries and Canada) were governed by bilateral textile agreements entered into between India and the respective countries under the aegis of MFA, outside the rules of the General Agreement on Tariffs and Trade

(GATT). From 01.01.1995, the quantitative restrictions (import quotas) on the bilateral agreements under the MFA were governed by the Agreement on Textiles and Clothing (ATC), contained in the Final Act of the Uruguay Round negotiations of the GATT

As per ATC, the textile quotas have been phased out and textile sector fully integrated into WTO w.e.f. 01.01.2005. The liberalized trading regime would result in increased global trade in textiles thus providing greater export opportunities and at the same time exposing the domestic industry to higher import penetration. The industry is gearing itself to meet the challenges emerging from global competition

On account of the changing scenario, it is expected that: (i) the average growth rate of export from the supplying countries under quota would increase substantially; (ii) the investment in the textile and clothing sector on the basis of comparative advantage amongst supplying countries will be promoted; (iii) an equitable international system for free flow of goods between suppliers, buyers and consumers will be established; (iv) the multilateral system enshrined under the WTO will be strengthened; and (v) consumer prices and transaction costs for consumers and distributors will be reduced across the board.

*Future scenario:* With the dismantling of the quota regime, the Indian textile exports are expected to receive a big push. Major textiles importing countries like the USA, the EU and others may look towards India for meeting their import requirements. India, according to several recent studies, is going to emerge as an alternative source of supply after China

The country's export growth is expected to be driven by value added made-ups and apparel as India has comparative advantages over its competitors in relation to (i) availability of relatively inexpensive and skilled workforce; (ii) design expertise; (iii) large production base of raw material like cotton, yarns and fabrics; and (iv) availability of wide range of textiles.

According to a recent study by CRISIL {commissioned by Indian Cotton Mills Federation (ICMF)}, the Indian textiles and apparel industry can achieve a

business of US\$ 85 billion by 2010, of which the domestic market share would be US\$ 45 billion and the share of export would be US\$ 40 billion, and approximately 60% of textile exports would be of garments. The liberalized trading regime would result in increased international trade in textiles thus providing greater export opportunities and in further creating additional jobs. It is reckoned that post quota regime would create 12 million job opportunities, which would include 5 million direct jobs in textile industry, and 7 million jobs in allied sectors

## **SERICULTURE**

India is the second largest producer of silk in the world, contributing about 18% to the total world raw silk production. India has the unique distinction of being endowed with all the four varieties of silk namely Mulberry, Eri, Tasar and Muga. Among Non-Mulberry silks, Tasar is produced, rearing silkworms on natural grown plantations. The Eri culture is domesticated like Mulberry culture and has a close link with the culture and tradition of the people of the North East. The golden yellow silk produced by the Muga Silkworm, *Antheraea Assama* is unique to Assam and neighbouring states of Nagaland and Meghalaya

In 2003-04, the total silk production was 15,742 M.T. - Mulberry silk 13,970 M.T. (88.7%), non-Mulberry silk 1772 M.T. (Eri 8.6%, Tasar 2% and Muga 0.7%). The sector provides gainful employment to more than five million people in the rural and semi-urban areas. There is substantial involvement of women in this industry.

## **CENTRAL SILK BOARD**

The Central Silk Board (CSB) was set up in 1949 through an act of Parliament, the Central Silk Board Act, 1948. Its functions included the three broad areas of: (i) Research & Technology Development, (ii) Seed Maintenance, and (iii) Development of Sericulture & Silk Industry, to support, supplement & facilitate the efforts of the State Governments. It also extends support to States in the form of joint projects and developmental assistance



under plan schemes. The Board also undertakes voluntary inspection of exportable silk goods for quality

#### **TEXTILES COMMITTEE**

The *Textiles Committee* was established under the Ministry of Textiles under the Textiles Committee Act, 1963. The Textiles Committee's main objective is to ensure the quality of textiles and textile machinery both for internal consumption and export purposes. The *Indian Silk Export Promotion Council* (ISEPC) was established by the Government of India in 1983, with the prime object of promoting and regulating the export of natural silk goods and to promote India's image as a reliable supplier of high quality silk goods like fabrics, made-ups, readymade garments and machine made carpets. ISEPC has a membership of over 2000 firms and US \$ 500 millions worth of silk products are exported annually to more than 100 countries.

#### **HANDLOOM**

The Handloom Textiles is one of the economic activities that reflects India's rich cultural heritage in its products. As an economic activity, the handloom comes next to agriculture in providing employment. This sector accounts for 13.12% of total cloth produced in the country, excluding products made of wool, silk and hand spun yarn. The government has initiated a number of policies and programmes, including Deen Dayal Hathkargha Protsahan Yojana, National Centre for Textile Design, Weavers Service Centres, Integrated Handloom Training Project, Design Development and Training Programmes, Weavers' Welfare schemes and Bunkar Bima Yojana for Handloom Weavers.

#### **Export Councils**

The export promotion councils set up by the Ministry of Textiles include Handloom Export Promotion Council (HEPC), Apparel Export Promotion Council (AEPC), Cotton Textile Export Promotion Council (TEXPROCIL), The Synthetic and Rayon Textile Export Promotion Council (SRTEPC), Wool and Woollen Export Promotion Council (W&WEPC), Carpet Export Promotion

Council (CEPC), Export Promotion Council for Handicrafts (EPCH) and the Powerloom Development & Export Promotion Council (PDEXCIL).

#### OVERVIEW OF SERICULTURE AND SILK INDUSTRY

As stated in the earlier paragraphs, India is the second largest producer of silk in the world and has the distinction of producing all the four varieties of silk. In 2003-04, the production was 15,742 M.T, with Mulberry accounting for 88.7%, Eri 8.6%, Tasar 2.0% and Muga 0.7%. Sericulture provides gainful occupation to more than five million people in the rural and semi urban areas in India.

**Table 1.6**  
**Sericulture Statistics**

	Particulars	2003-04	2004-05
			(Estimation)
I.	Standing Area under Mulberry (Lakh hectares)	1.85	1.85 .
II.	Production of raw silk (Metric tons)	15,742	17,380
III.	Employment (Lakh people)	56.50	58.00

The *silk products* manufactured include: (i) *Silk Garments* like silk tops, traditional outer wears like *Pattu Pavadai* (Outer skirts), etc; (ii) *Silk Accessories* like scarf, stoles, shawls, handbags, ties, etc; (iii) *Silk Sarees*, classified into Brocade Sarees, Zari Sarees and Printer Sarees; (iv) Silk Fabrics like Dupion, Taffeta, Embroidered, Organza, Chiffon & Georgette, Plain Silk, Printed Silk Dupion, Quilted Silk, etc; (v) Home Furnishing like Cushion Covers, Bedcovers, Upholstery, Curtains, etc; and (vi) Silk yarn.

**Table 1.7**  
**SILK EXPORTS**

(Rs. Crores)

	Items of Export	2002-03	2003-04*	2004-05* (April - Nov.)
1.	Natural Silk Yarn, fabrics & Made-ups	1,654.96	1,698.66	1,158.28
2.	Readymade Garments	527.20	751.07	503.64
3.	Silk Carpets	96.13	121.63	55.95
4.	Silk waste	15.76	5.16	0.97
	Total	2,294.05	2,576.52	1,716.83

\* Provisional figures & subject to change.

Source: Directorate General of Commercial Intelligence & Statistics, Kolkata

- Silk exports constitute about 3-4 percent of India's total exports
- Eventhough India has a large domestic market for silk products, about 30% of Indian output, comprising of all types of silk goods, is exported
- India's exports consist exclusively of Dress Materials, Readymade garments, Sarees and Made-up articles for interior decoration (e.g., Bed spreads, Cushion covers, Curtains and Carpets etc.).
- Though India is the second largest producer of raw silk in the World and biggest importer of raw silk, it's share in the global silk export trade still continues to be fairly insignificant. However, it does not mean that Indian silk products could not have a higher market share in some specific product groups. The demand for traditional Indian silk fabrics has increased in international market. The silk garment exports are increasing significantly from 1999-2000 onwards. The value of silk garment exports during the year 1999-2000 was 86.22 Mn. US\$ (Rs. 373.73 crore) which has increased to 163.42 Mn. US\$ (Rs. 751.07 crore) during 2003-04, indicating an increase of 89.5 and 101% in dollar and rupee terms, respectively.
- India's export trade is highly concentrated with 10 leading buyers around the world viz., USA, U.K., UAE, Italy, Malaysia, Germany, France, Spain, Saudi Arabia, Singapore etc. The share of total Indian exports by these countries is over 80%.
- The percentage share of the top 10 importers of Indian silk products on total Indian silk exports is given below:

**Table 1.8**  
**Percentage of Share in India's total Silk products Exports**

<b>Country</b>	<b>% Share in India s total Silk products Exports</b>
USA	25.90%
UK	10.60%
UAE	7.70%
Italy	6.70%
Malaysia	6.10%
Germany	5.90%
Saudi Arabia	4.50%
France	3.60%
Spain	3.40%

### Item-wise analysis of Indian silk exports

*Natural Silk Yarn, Fabric, Made-ups, etc* account for about 61.3% of the total Indian silk exports. The major importing countries are U.S.A., U.K., Italy, Germany, U.A.E., Saudi Arabia, Singapore, Spain and China (Hong Kong).

*Ready-made Garments* account for approximately 35.3% of the total silk goods exports. The major importing countries are U.S.A., Malaysia, U.A.E., U.K., Italy, Germany, France, Saudi Arabia, Spain and Canada.

*Silk Carpets constitute about 3.4% of total exports of silk and silk products.* The major importing countries are U.S.A., U.K., Germany, Oman and Italy.

*Silk Waste* exports had shown a declining trend in the last couple of years, the main importing countries being Thailand and Sri Lanka.

- *Imports:* To cater to both, domestic as well as exports demand, India imports raw silk and silk yarn/fabrics (mainly *Bivoltine raw silk & yarn*), mainly from China, Switzerland and Japan. In 2003-04, the estimated imports were US \$ 18.76 Million, comprising of imports of raw silk (US \$ 9.59 Million) and Silk yarn/fabrics (US \$ 9.17 Million)

### Gandhi and the Weave:

It was Mahatma Gandhi who unerringly picked on the spinning wheel as a concrete example for the nationalist movement of the 20th century. Here was a tangible symbol from the grassroots that represented a means to livelihood and food for millions of people; here too a potent weapon for opposition to British power. Along with the symbol went one word: *Swadeshi*, of the country, echoing concepts of self-sufficiency and restoration of national pride. Indian freedom fighters threw their mill-mades from England into giant bonfires and wore handspun textiles to defy the Raj, calling them the "livery of our freedom". Gandhiji made spinning wheel a symbol of self-reliance, investing it with the dignity of a national emblem. In so doing, he gave a new life to the handloom industry of India (Mathur, 2002).

Kanchipuram, being a place of historical importance, has a recorded history from the periods of ancient Indian era. The silk city, finds a special mention in the *Sangam* classics, travel accounts of the famous foreign travelers like Fa-Hien and Hieun Tsang, rock edicts, inscriptions and epigraphs in Tamil and Sanskrit. Being a capital city, a popular place of pilgrimage and one of the ancient cities (nagaram), Kanchipuram, has carved a *niche* for itself in the pages of history as an important seat of higher learning (*Ghatikasthanam*).

A chronicling for gaining insights into the cause and effects of various happenings in the industry by exploring its lengthy past of has also been attempted in this study (See Chapter 3 - Kanchipuram Silk through Ages section).

From the chronicling, it could be observed that the weavers of Kanchipuram have enjoyed a prominent position in the society from the very early periods of known history. The occupation has commanded respect in the society to that extent, which has made one of the donors to a temple, be proud in identifying himself as a weaver, in the inscription, which recorded the event.

Having commanded such a royal patronage, there is no doubt that the industry would have flourished under them. Another fact, which is also evident from these events, is that the silk handloom industry has been so lucrative, which made the state levy taxes on the weavers and looms of Kanchipuram.

Even during the British regime, there has been a mention about the Kanchipuram area specializing in silk fabrics. Moreover, the advent of Cooperative movement has happened during British regime in the Madras Presidency, which is in proximity to the Kanchipuram cluster.

Cooperative movement has also gained footing in Kanchipuram in the pre-independence era itself and also has to its credit of being a self-initiated process of organizing into Cooperatives.

In the post-independence period too, the cluster has received continuous attention from the government. The number of cooperatives and their

membership has seen a growth and various schemes benefiting the cluster have been initiated. Many technical and support institutions like Anna Silk Exchange, TANSILK, Central Silk Board, Weavers Service Centre, Sericulture department, Handlooms department have come into being in the cluster at various points of time to provide assistance and boost the competitiveness of the cluster. A number of schemes like Intensive Handloom Development Project, Textile Centre Infrastructure Development Scheme, and Scheme for Integrated Textile Parks have been initiated for the benefit of the cluster.

### **Kanchipuram Silk - What makes it Unique?**

A thicker silk forms the ground in Kanchipuram, Tamilnadu; here, the silk thread used is actually three threads twisted together, one reason why the fabric is heavier and stronger than many other types of silk. Rich colours, often with contrasting borders and pallus, are woven with zari in motifs such as the rudraksha, or the perennial peacock and parrot. Most of the raw silk comes from neighbouring Karnataka; and in contrast to the antiquity of many other textile traditions, that of Kanchipuram silk weaving is just a couple of centuries old. Another speciality of Tamilnadu is the temple sari woven as an offering for deities in a temple. Heavy with gold and with broad borders, the temple sari must be flawless to be worthy of being offered to the deity (Balaji, 1991)

Kanchipuram Silk commands market throughout India, and in foreign countries like Ceylon, Burma, Malaysia, France, Italy and United States of America. Kanchipuram is famous for "Tissue" sarees (silk and lace interwoven) produced in different sizes ranging from 24 inches to 52 inches in width and from 18 feet to 30 feet in length with attractive borders and variegated designs and colours.

Major Products of the cluster are Korvai Saree, Tissue Saree, Jacquard Saree, Silk Churidhars and Pavadai (Silk Skirts).

According to a Sericulture expert of the Government of Tamilnadu stationed at Hosur, the chief attraction of silk fabric being its lusture, and raw silk being dull in colour, the water used for degumming and dyeing of raw silk

ought to have certain properties in order to impart lusture to silk. The Palar river water of Kanchipuram possesses this unique quality of imparting lusture to raw silk and this may be one of the reasons for silk weaving industry taking a firm root in Kanchipuram.

Weaving of silk saree is a cottage industry involving the whole family including children from winding of the yarn on the bobbins to working the shuttle during weaving. There were about 5000 looms in Kanchipuram, which was twice the number of weavers in the year 1968. The yarn after being washed is dyed in fast colours. The yarn is twisted twice, which is unique to Kanchipuram Saree. 'Kanchi' is proud of having a twisting factory owned by Kanchipuram Kamakshiamman Silk Handloom Weavers Cooperative Production & Sales Society, established at a cost of one lakh rupees.

Silk dealers in private sector, barring a few, get a substantial part of their goods woven from the master weavers, who act as intermediary between the weavers and dealers. Out of all the Cooperatives devoted to production and sale of silk textiles, the Kamakshiamman Society was the first to be started under the Cess fund Scheme. On the technical side, a change from what is known as "Kamakshipuram Bobby" to "Jacquard" has been introduced by this society for increasing the earning of the weavers.

#### **Size of the industry:**

Society sources place the annual output from the various cooperatives at around Rs.85 - 90 crores. According to the industry estimates, 30-40 percent of the produce is sold through Co-optex outlets, another 40 - 45 per cent through outlets at the production centres and the balance by the cooperatives themselves.

According to the master weavers in the private sector, the total output of the industry is estimated at around Rs.250-300 crores. This sector provides employment to more than a lakh of workers in areas such as yarn-making, twisting, reeling, dyeing and weaving.

**The Silk Yarn:**

Karnataka is a major supplier of silk - through the Karnataka Silk Marketing Board outlet established here. The private sector largely depends on this outlet for their raw-silk requirements. This outlet sells about three tones a month. Of late, Andhra Pradesh has emerged as a prominent supplier and some amount of silk comes in from Assam and Kashmir also. Some production centres have emerged in Tamilnadu - Coimbatore, Thalavasi, Hosur, Tirupattur, Thalavadi and Dharmapuri meet around 25 per cent of the weavers' raw silk needs. The Tamilnadu state government plans to expand mulberry cultivation in an additional area of 10,000 acres to meet the demands of the weaving industry in the state.

Raw silk, locally called as *Kora Silk* goes through three to four stages before being loaded into the loom. These activities provide employment to about 300 families in the area. The raw silk is first reeled to the spindles, which is further twisted to form multiple ply silk threads for weaving. The threads are then dyed in various hues depending on the requirements. These activities come under the control of either the master weaver or the cooperatives.

The state-run Anna Silk Exchange at Kanchipuram procures silk from reeler members and also provides financial support to reelers during price slumps in the yarn market. It also provides soft-loans of up to 75 per cent of the cost of the raw silk pledged with the exchange. Almost all the silk from the exchange is procured by TANSILK, the apex cooperative federation, which trades in both raw and ready silk yarn, which is supplied to the weavers' cooperative societies. Despite these the industry here depends on neighbouring states for raw materials. Nearly 75 per cent of the silk and 80 percent of the zari are brought in from outside.

**The Reelers and Twisters:**

When silk reeling and twisting were done manually, they were separate operations. With the introduction of mechanized twisting these have been combined into a single process. There are over 50 factories employing about



500 people. Two factories are operating in the cooperative sector and the rest in the private sector.

The twistors are paid about Rs.300 per kg for silk in the case of warp yarn, which involves greater twisting. Wastage of about 50 gm is allowed. For weft yarn, the charge is about Rs.160 per kg of silk, allowing for a wastage of 35 gm. The workers mostly women are paid around Rs.50 per day.

### **The Zari:**

The gold thread, otherwise known as zari is an inherent part of silk sarees, and is largely supplied from Surat. The production is a traditionally maintained secret with just a few families having access to it. Another cause of concern in recent times is the quality of zari. The rising cost of gold and silver has contributed to its deteriorating quality. Earlier there were just four qualities in the market but now there are umpteen grades. A Centralised Purchase Committee (CPC) has been constituted for the regulation of the price of zari at the Directorate of Handlooms and Textiles, with the Director (Handlooms) as its Chairman and 20 members comprising of Special Officers from Arignar Anna Silk Weavers Cooperative Society (SWCS), Kamakshiamman SWCS, Thiruvalluvar SWCS, Murugan SWCS, Thirubhuvanam SWCS and Salem SWCS, circle Deputy directors. This committee meets on the first week of every month to fix the price of zari based on sealed bids obtained from zari manufactures through sealed tenders.

As an attempt to provide the cluster with good-quality zari at a reasonable cost, the Tamilnadu government has set up Tamilnadu Zari Limited (TZL) for its manufacture. However with the traditional zari makers unwilling to part with their knowhow, the efforts have been partially successful. 'Zari' thread is composed of 3 critical components integrated together by well-developed process of spinning and gilding. The three components are

- *Ultra-fine Silver wire:* Very fine silver wire, made up of silver and copper in various proportions is drawn to size of 25 micron. The composition of Kanchipuram grade wire is 77% Silver and 23% Copper.

- *Silk thread*: The silk thread forms the core over which the flattened Silver alloy wire is wound.
- *Gold coating*: The uncoated silver thread is then given a gold coating employing the well known electroplating process which is controlled to give uniform covering with overall gold content of 0.59% - 0.60%.

The gold-coated silver thread containing the silk core is called "**ZARI**". The required raw materials for the production of the gold zari are: -

**Table 1.9**  
**Contents of Zari**

Silver wire	76 to 77%
Silk	13 X 15 denier
Gold	24 carat.

Source: Tamilnadu Zari Limited

The Zari is sold in terms of MARC (One marc = 242 grams). The composition of the marc is indicated below: -

**Table 1.10**  
**Composition of Marc**

Silver	55 to 57 percent
Silk	22 to 24 per cent
Gold	0.59 to 0.60 per cent
Copper	20 to 22 per cent

Source: Tamilnadu Zari Limited

The unit is having a well-equipped laboratory for testing raw materials and finished product (viz) Gold thread. Apart from this the Zari purchased from Surat by the Silk Cooperative Societies in the state are also tested at the laboratory. There are two major types of testing the zari; they are (i) destructive method and (ii) non-destructive method. Under destructive method of testing, a sample drawn from the zari thread is treated with some chemicals to ascertain its quality. The process involved destroys the fibre, hence the name destructive testing.

An alternate method of Non-destructive X-Ray Fluorescence Testing is done on the fibre, developed by IGCAR, Kalpakkam. This testing facility has

also been kept open to customers for testing the quality of zari in the silk sarees which they have purchased, which is invoking a warm response from the public. (See Annexure II - Case study 1).

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There are about 100 dyers in Kanchipuram. The dyeing cost per bundle of silk is Rs.100/- to Rs.130/-. Normally the dyes used in Kanchipuram are Naphtoles, Vat and Acid dyes. The equipments used for dyeing are wooden tubs, Steel tank, wooden sticks, bamboo sticks and copper vessels. Though predominantly traditional methods are used for dyeing, there is a slow switch over to modern methods. The Central Silk Board has introduced a new 'steam dyeing' technology, which comes with a 75 percent subsidy for the adopters. This new method is advocated to be more efficient in fixing the dyes to the yarn and reduces wastage. [See Annexure II - case study-8].

#### **The Weavers:**

Working under a master weaver, the weavers can hope to make anywhere between Rs.750/- and Rs.3000/- a saree as wages. A weaver attached to cooperative society shall earn about 40 percent more wages for a similar job. Depending on the intricacy of the design, the weaver takes about 10-15 days to make a saree. The raw materials are provided by the master weaver in the case of private and cooperatives in the other cases. Moreover, they may also get a bonus in the case of cooperatives. Earlier for a quicker weave, additional bonus was given to the weavers by cooperatives, which has been stopped in the recent periods.

#### **Private weavers -:**

- The wages of the weavers working under the private fold is based on the mutually agreed structure fixed by the Committee headed by the District Collector with labour welfare officer, traders' association representatives and labour union leaders.
- These wages are revised every three years

- The private weavers do not receive any dearness allowance as was in the case of cooperative weavers; now they too do not receive any such benefits.
- The bonus is fixed at Rs.75/- per bunch of yarn (called *porai* out of which three sarees can be weaved) weaved by the weaver per year
- But these systems are seldom followed in practice. Most of the weavers are compelled to receive a blanket rate (normally Rs.1000/-) for three sarees due to their poverty and competition for doing the same job for a lesser wage.

### **Changing styles:**

Tradition-bound master weavers believe that the art of weaving the traditional Kanchipuram silk saree is slowly declining with influx of the younger generation, mostly school drop-outs, and cotton-fabric weavers who get into silk weaving because it is lucrative and less laborious. But those given less to tradition believe that the older art is on its way out owing to changing styles since the young generation women are less interested in wearing heavy silks and traditional designs.

In addition, it is also said that in the export market heavy sarees stand to lose when the price is fixed per unit area of cloth. Thinner fabrics of less weight enjoy an obvious advantage. Therefore, the new-breed of weavers are being encouraged to produce thinner silk fabrics. But in terms of wages, the traditional cloth helps the weaver to earn more. So the more senior weavers prefer to stick to tradition.

Those who are in the trade for a longer period point out that there is more to a silk saree than just fashion or as in some cases a status symbol. It is an essential part of the culture, particularly in the South. They point out that it is the inherent qualities of the "*Kanchipuram Pattu Seia*" (silk saree) that has made it so. Therefore, there would always be a market for the traditional sarees.

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- The speciality of Kanchipuram loom is in the '*adaf*' or '*naksha*' for the evolution of the designs for which the Kanchipuram Sarees are famous.
- In case of '*adai*', graph paper design has to be prepared showing the interlacements of threads. This design is transferred to the harness of the '*adaf*' with the help of a trained assistant. In a Banaras loom, *naksha* is prepared straight without this intermediate stage of a graph paper design. In *adai*, the strings are horizontally arranged. Whenever, new set of designs is woven, the horizontal strings are united, the old loops removed and the new loops tied on to it. In Banaras loom, the horizontal threads or the *pagias* remain untouched and the *naksha* takes less time than the preparation of *adai*.
- Besides, Jacquard is used in looms; in some cases, frames are used for the sley and there is a frame attached for both *dobby* and *jala*. Kanchipuram *Jala* is unique in the method of selection and lifting of the warp ends for the designs. It is different from that used in the Banaras looms.
- The Kanchipuram sarees, generally made of pure silk are woven with three shuttles to give solid border effect. As against the imported Japanese silk which is mostly used for producing Banaras sarees, cultivated indigenous silk is used in the manufacture of Kanchipuram sarees.
- Kanchipuram sarees differ from Bangalore sarees in one respect, viz., that in the case of the former, the number of threads used both in the warp and the weft are double. Thus as compared to Bangalore sarees, Kanchipuram sarees are more closely woven and hence, very firm in texture.
- The colour of the border and the *pallu* of the sarees is usually in contrast with the colour of the body. This contrast colour effect is produced by adopting two different techniques, viz., (i) by three shuttle weaving, by employing one for the body of the fabric and two shuttles for the two side borders and (ii) by attaching contrasting colour threads to the *pallu* portions. Both these techniques are laborious and time consuming but the weavers are so used to these works that they do it with ease and dexterity.

- Kanchipuram sarees are heavier because more silk goes into an unit area of cloth than in sarees woven at other centres. The difference arises right from the twisting of the silk yarn. The thickness of the silk measured in deniers is much higher. For the warp, 18-20 grade denier is used and for the weft 24-26 grade denier. In the warp, nearly 200 strands of silk per inch run through the reed during weaving and the breadth is 50 inches. In sarees woven at other centres just 100 strands are used.
- According to an adept master weaver, the Kanchi silk is distinguished by the quality of silk, the sheen and weight. This is due to the careful selection of quality yarn. Skilled master weavers prefer to buy silk from Chitlagutta in Karnataka, which is more expensive and is of a better quality. This is attributed to the water used during the processing of the cocoons. But the new breed of weavers is not very particular about these aspects.
- The interlocking of the border of a saree with the body is a characteristic feature of the double-coloured saree, which is popularly called '*Korvaf*'. This requires employment of subsidiary weavers or children to carry out this attachment but with these subsidiary workers getting into weaving and the stringent prohibition on employing child labour in looms, this variety is slowly discontinued from the production line. Nowadays, a large section of the weavers are catering to the north-Indian style of single coloured weaving.
- One more special feature of Kanchipuram silk saree is the end piece (pallu) with elaborate designs, which is weaved separately and later attached to the body, without any flaw on the outer side. Even in the inner side, the joints are so finely cut, that it will not affect the strength of the saree. This distinct feature is found only in Kanchipuram silk sarees.
- Kanchipuram is also famous for weaving cotton sarees, but the weavers are producing only 60 & 80 counts (coarse variety) which are generally used by the middle class and lower middle class people.

### Role of NABARD;

National Bank for Agriculture and Rural Development (NABARD) has played a major role in providing funding for this industry through the Tamilnadu state apex Cooperative Banks. According to the information provided by NABARD, under the Potential Linked Credit Plans, the total refinance support from it to Tamilnadu during 1994-94 was Rs.259 crores. More than 60 per cent of this was allocated to Cooperatives. The refinance support increased from Rs.174.90 crores in 1994-95 to Rs. 230.12 crores in 1995-96. Assistance to Co-optex has also gone up from Rs.109 crores to 145 crores during the same period.

### **NABARD recommendations for development of the industry:**

Some of the NABARD recommendations for developing the industry are

- The Centre should undertake more research and development activities to improve the quality of yarn being produced,
- Opening of more cocoon exchanges in Taminadu and
- Strengthening of the existing ones to increase the marketability of cocoons

The commercial banks should come forward to cover handloom weavers in a bigger way. The financial assistance to this sector is on the decline and the banks should come forward to provide timely loans and working capital.

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## **Chapter 2**

### **REVIEW OF LITERATURE & RESEARCH DESIGN**

#### **Section-1: Review of Literature**

The Indian small-scale industry sector contributes 40% to the country's industrial output and 35% to direct manufactured exports. Clusters that have been around for decades and centuries play an important role within the MSME sector. According to a UNIDO survey, there are 388 SME clusters and approximately 6,000 rural and artisan based clusters in India. These clusters together are estimated to account for 60% of the manufactured exports from India. They also contribute significantly in creating employment. There are some clusters that are small in size, but so specialized that no other craftsmen could probably match their output quality. But the downside of such clusters is that they are declining in terms of number of enterprises due to the changing consumer demands and in that factor, low level of market & technological adaptability of the cluster enterprises.

Despite several researches, knowledge of clusters, how they develop and what makes them successful or fail or what leads them to follow a particular trajectory of growth remains largely unknown. Information on clusters in developing economies like India remains rather superficial. In order to review the available literature in this area and identify the gap in research, an attempt has been made in this chapter, with utmost care to review path-breaking research studies in the arena of MSME clusters, their competitiveness, impact of liberalization and globalization, knowledge management and internationalization. In the case of handlooms and handicrafts cluster-building, the roles of UNIDO and Textiles Committee are primordial. Hence their documentation of field experiences has been pre-dominantly reviewed for a context specific understanding. While studies by multi-lateral agencies like ILO, World Bank, UNIDO, academic institutions and articles of international journals have been reviewed for macro issues, case studies on clusters have been reviewed for understanding the micro level cluster dynamics. Only those

abridgements of studies which had direct implication for the present research have been included here.

### **Studies on SME/ Cluster/ Competitiveness:**

Porter (1990) presenting the product of a four year study of the patterns of competitive success in ten leading trading nations concludes that a nation's competitiveness depends on the capacity of its industry to upgrade and innovate. Four broad attributes working as a diamond system are identified as determinants of national competitive advantage - factor conditions, demand conditions, presence of related and supporting industries and firm structure strategy and rivalry. He concludes that competitive advantage is created and sustained through a highly localized process. Hence, nations would succeed in those industries where the home environment is most forward-looking, dynamic and challenging. The cases of Italian Ceramic Tile industry and Italian footwear cluster have been dealt with in detail to explain the operation of the diamond of competitive advantage in reality.

Cawthorne (1993) attributes the multiplicity of Tirupur SME units working to the disadvantage of labourers. Terming the spatial and organisational fragmentation and spin-offs as the growth of 'amoebic capitalism', the study reveals that in such a scenario the possibility of workers coming together under trade unions and problems in controlling larger pool of labourers are avoided by the owners. The study observed that while job working enables large numbers of small capitalists to come into existence, and with it the perpetuation of a 'petit bourgeois' consciousness, on the other hand, an increasingly sophisticated class consciousness which has given rise to a determined struggle for improvement is noticed. This feature is observed to have increased (%) the pay levels of the workers but only at the cost of heavy labour.

UNIDO (1997) has conducted a diagnostic study of the Tirupur cotton hosiery cluster. The study attributes the factors such as extensive collaborative arrangements in production, informal sharing of information, tools and equipment, well functioning local institutions, labor markets, informal credit

arrangements being the reason for dynamic expansion of the cluster. The study also identified pro-active marketing, inter-firm production arrangements, active social system as the other important factors that have led to the growth in response to the competitive environment. Major problems facing the cluster were identified to be production of low value products with limited growth prospects, poor quality products and low productivity, poor human resource base, environmental pollution, weak institutional framework, finance at high rates of interest affecting competitiveness, infrastructural problems (power shortage, improper roads and water scarcity) and rapid obsolescence of machinery due to changing fashions.

Porter (1998) argues that competitiveness of companies is dependent upon its business environment. Clusters provide a conducive environment by forging unique alliance of competition with cooperation, both occur on different dimensions and among different players. Clusters affect competition in three broad ways: first, by increasing productivity of companies based in the area; second, by driving the direction and pace of innovation, which underpins future productivity and growth; and third, by stimulating the formation of new businesses, which expands and strengthens the cluster itself. A cluster, thus allows each member to benefit of the larger scale without requiring it to sacrifice its flexibility.

Liu et.al (1998) bring out the salient features of Township and Village Enterprises (TVEs) in China which were highly export-oriented and labour-intensive which brought them the comparative advantage over the State Enterprises (SEs). Surveying about 46 enterprises across Shanghai and Beijing provinces TVEs were found to have acquired technology, management know-how and marketing through sub-contracts and joint ventures with SEs. The size of TVEs were found to be large with number employed ranging between 200 to 600 due to the bargaining power advantage, scarcity of rural entrepreneurs and lack of efficient marketing sector to organize small units effectively. While TVEs thrived on sub-contracting they did not establish sub-contractual relationships with smaller units due to difficulties in monitoring

quality and adherence to delivery times. In addition to intermediation in business partnerships, local governments actively promoted TVEs through provision of infrastructure, support in financial management and guarantees for bank loans. Exemption Policy of JVs from income tax for the first two years and 50% reduction in the following three years is highlighted as a major step towards export-promotion. Posting of professional managers and engineers from parent company through subcontracting had immensely benefited TVEs. Moreover, TVEs have contributed to the successful rural industrialization by effective mobilization of cheap labour force in rural areas.

Ohna et.al (1998) observed that harnessing the comparative advantage in labour management of rural household industries and expansion of the relational contracting system to rural areas shall enhance the market competitiveness of the modern garment sector in Northern Thailand. The study brings out the fact that putting out contract system and advance order contract system had helped them in overcoming disadvantages in marketing. To create and foster rural entrepreneurship the study suggests establishment of modern garment factories in rural areas, furnishing information on product market to weaving entrepreneurs, preservation of dual labour standards, supply of cheap production tools and development of infrastructure and preservation of traditional weaving skills.

In the face of the new competition, however, it is important to note that not only firms but also local business associations need to upgrade (Nadvi 1999). Associations have to increase and refine the delivery of appropriate producer services that effectively lower costs to local firms. They need to articulate the concerns of the cluster more effectively to the state, and identify and promote targeted and focused forms of state intervention that strategically assist the cluster. The case of Sialkot Surgical cluster of Pakistan has been detailed where the pro-active role of association has helped the SME cluster in quality upgradation. The fiasco of collective effort in Brazilian Sino's Shoe Valley cluster case due to the diverging interests of each of these sub-sector specific trade bodies has also been exemplified.

Altenburg et al.,(1999) point out that Latin American SME clusters suffered of three major weaknesses namely heterogeneity of development levels and lack of competitiveness, lack of innovative capabilities and low degree of inter-firm cooperation and specialization. The strategies to tackle these lacunae differ in each typology of cluster viz. differentiated mass production clusters, clusters of transnational corporations and clusters of micro and small scale enterprises (MSEs). The study emphasizes the primordial role of policy support to the MSE segment since they are the clusters generating more jobs in developing nations. In supporting innovation, the study advocates a demand-driven approach.

Ramachandran et.al.(1999) highlights export orientation as the major reason for Chinese growth. Taking a closer look on the Chinese experiences of Export Processing zones the study lists various lessons for Tamilnadu which include, strategic targeting of specific sectors with a definitive comparative advantage for export growth; planned and rapid growth in labour-intensive manufacturing goods in terms of exports, employment and Foreign Direct Investments (FDI); price liberalisation; prominence of Township and Village Enterprises (TVEs) in manufacturing sector; mobilization of overseas Chinese funds and establishment of Overseas Chinese Investment Enterprises (OCIE); strategic inflow of foreign funds in the forms of FDIs, soft loans and commercial borrowings; favourable investment policy environment; strategic economic and cultural partnerships; open door policy encouraging SMEs to initially produce for local demand and later export labour-intensive manufactured goods through Special Economic Zones (SEZs) and decentralized economic system vesting powers with provincial governments.

Tewari (2000) stresses that it would be vital for the Government of Tamilnadu, while revitalizing the regional competitiveness, to craft policies that would widely diffuse the benefits of economic growth of the new industrial sectors among those excluded from such sectors. The study suggests a strategy to this effect by creating institutions of upward mobility that will allow the government to leverage market reforms to boost industrial dynamism, and

work to simultaneously counter the regressive and polarizing impact of trade liberalization on regional industry. While stressing on the importance of building upon historical advantages to develop a dynamic, and diversified industrial base the study suggests a five-pronged approach to modernization. Apart from emphasizing cluster development and competitiveness building, the study emphasizes innovative administrative reforms for successful performance.

The Indian garment sector is found to consist of smaller firms as compared to other exporting peripheral nations, thereby placing limits on the sector's ability to compete on the basis of productivity observed Vijayabaskar (2002). With a lesser number of registered manufacturing exporters, incentives to improve production techniques are not forthcoming. Hence, Indian garment exports depend more on fashion changes than on any inherent competitive strength based on quality or productivity. A detailed analysis of the competitiveness of Indian garment industry in terms of comparative advantage and labour productivity as against the direct competitors like China and Indonesia has been attempted in the study. The study also pointed out that the among a number of competitiveness indicators in terms of labour it is found that wage adjusted for productivity is one of the highest in India though it ranks far behind China in terms of wage levels for the given productivity. A special case study on Tirupur cluster also forms part of this literature.

Tewari et. al (2002) observed based on a survey with 42 key people across four major manufacturing sectors of the state, a wide variation, in the post-liberalisation era within and across the textile industry segments of Tamilnadu viz., handlooms, powerlooms and mills. The study also lists the strategies of successful firms in these sectors including forward integration into garments, technical upgradation, waste reduction, employing professional consultants, strengthening distribution channels, entering new markets, tapping export markets, etc. Four characteristic patterns were noticed by this study viz. smaller firms specializing in smaller product range, variations in production strategies between exporters and domestic players, reorganization of human

resource practices and industrial relations, and adoption of a wide range of profit-enhancing, cost-saving and productivity related changes.

Efforts towards internationalization of SME units in Tirupur knitwear cluster were on according to the report of Gangavkar (2003). Since the dismantling of quotas in 2004 was expected to open up new markets for this dynamic cluster, the efforts towards sensitization, exposure visits, exposing the SMEs to export procedures, quality drive, seminars on roadmap to global competitiveness were organized in the cluster. Several technical capacity building programmes to upgrade the dying units and help them in product diversification were organized by the Textiles Committee for the cluster. Though the cluster had been growing in the export front, infrastructure bottlenecks like power shortage, water scarcity, and lack of local designing initiatives scuttle the progress of the cluster. Stringent pollution norms and competition from China, Bangladesh, Pakistan and Srilanka have been identified as major threats in the WTO regime for the cluster by this study. Efforts towards common brand building and setting up of apparel park admeasuring 200 acres under the active involvement of Tirupur Exporters Association (TEA) is expected to boost the competitiveness of the cluster.

Nadvi et al (2004) relating clusters and poverty argue that industrial clusters affect poverty in both direct ways - in terms of employment, income and well-being for the poor and indirectly through their wider impacts on local economy - upgraded infrastructure, external linkages, etc. Clusters in rural areas and in the urban informal economy, clusters that have a preponderance of SMEs, microenterprises and homeworkers, clusters in labour intensive sectors and clusters that employ women, migrants and unskilled labour, were observed to have more direct impact on poverty. The study emphasizes that cluster development initiatives need to distinguish between incipient clusters where poverty incidence is high, and growth engine clusters that can generate incomes both directly and indirectly for the poor, and have strong local institutions that strengthen the ability of clustered actors to engage in pro-poor collective action. The paper proposes a methodology for impact assessment of

poor groups within clusters drawing on a capability approach, in order to assess how the well-being of poorer groups identified in the mapping is affected.

Nikaido (2004) examining the technical efficiency of select groups of Small Scale Industries in India, applying the Stochastic-frontier model concludes that firms located in clusters were able to gain out of the spillover effects of knowledge and had easy access to skilled labour force. While the agglomeration of firms into clusters had a positive effect on technical efficiency, the firm size had a negative effect. The effect of number of employment per unit was found negative and significant but the preference to invest in plants and machinery to employing more labourers reflected in high factor share of capital, which is contrary to the social aim of employment creation in SSI sector. While clustering of firms helps the government to reduce the unit cost of monitoring and infrastructure, the study warns that the cluster firms are vulnerable to exogenous shift in production and technology, particularly in the case of isolated or distant clusters from the market.

Singh et.al (2005) in a study of the perceptions of selected Garment exporters in Delhi and Ludhiana regions following the phase-out of Multi-Fibre Agreement (MFA) from January 2005 state that there is much of optimism among majority about gaining access to newer markets. More than 90 per cent of the respondents have categorized 'handloom' segment to be the third most important segment irrespective of the export turnover category. Usefulness of the Cluster program, competitive pricing, ISO certification, sales visits abroad, participation in buyer-seller meets have been felt as the important factors for better performance in post-MFA environment.

With the growing realization of the limitation of lack of professional management in SMEs, performance measurement assumes primordial importance. Garengo et.al (2005) reviewed eight performance measurement models developed over the past two decades, juxtaposing their features based on eight dimensions. They were also compared according to three typologies - vertical, balanced and horizontal. Though all the models were found to be balanced (comprehending the entire gamut of activities of the organization);

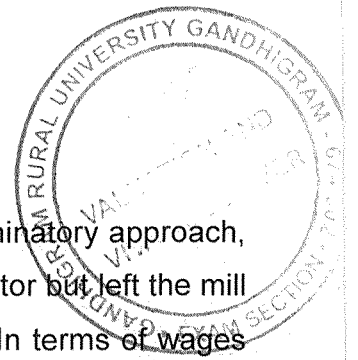


only two were designed specifically for SMEs. A continuous evolution towards process-oriented performance measurement is observed. Clarity and simplicity of the model has been found as the important characteristic for application in SMEs. The study also emphasizes on more empirical research in this area and initiates numerous questions for further research.

Hashim (2005) examining the competitiveness of Indian Textile and Garment Industry in the Post-MFA scenario places the major responsibility on policy front to carry out bold structural changes for better growth opportunities. It is found that Tamilnadu tops the list by contributing highest to the output in cotton yarn (39.4%) and is second only to Delhi in the garment sector (23.4%). While the cotton yarn industry is found to have limited scope for employment, the garment industry offered better employment prospects and wages. Since the unit cost of production is perceived as a major competitive element, the study emphasizes steps to increase productivity of the sector. The study suggests strategic measures after a detailed statistical analysis of the productivity of the industry. The focus areas suggested to enhance cost competitiveness of both these sectors include opening up of garment sector to large scale players, cheaper credit, cheaper raw materials supply, promotion of better capacity utilization, proper power supply, flexible labour laws, easing out the entry-exit norms for firms, and reduction in nominal rates protection and non tariff barriers. The study appeals to focus on selected states having a comparative advantage in the industry.

#### **Studies on Handloom/Handicraft industry and handloom clusters:**

Analyzing the historical issue of small versus large units in the Indian textile industry scenario Mazumdar (1984) brings forth a comparison of handloom, powerloom and mill sectors in terms of policy, value addition and private/social cost-benefit analysis/profitability based on a survey conducted among the handlooms and powerlooms units of Mau Province in Uttar Pradesh. The study had also attempted to evaluate some aspects of the impact of the Indian textile policy on employment, consumption of cloth exports and



technological change in the large-scale factories. The discriminatory approach, the study says, had increased production in the handloom sector but left the mill sector in a weak wicket in terms of export competitiveness. In terms of wages per adult male the study found a striking similarity between handlooms and powerlooms, but wages in the mill sector were found far higher. The switch over from handloom to powerlooms, results in additional capital cost of Rs.6948/- for the master weaver and the internal rate of return was found to be unattractive at 46.05 per cent for an expected life of the capital stock for 25 years. The shadow wages of handloom workers has been reported to be lesser than the market wage of the counterparts. But the study suggests that the switch over from handlooms to powerlooms is socially profitable since the social rate of return is high.

UNIDO-CDP (1997) in its diagnostic study of the Jaipur hand block printing cluster pointed out that the cluster was competing on the basis of low prices, usage of cheap materials and cheap labor. Lack of innovation and infighting among various actors in the industry are the other characteristics of the cluster. The units despite being dependent on each other are not united to take up issues for their long term development. The level of co-operation among the units, traders and designers is found to be poor. The trader is found to be the maximum beneficiary in the industry. With the loss of traditional market and lack of readiness to meet the requirements of the market that values the ethnic tastes, the new generation of traditional printers seems to be at a loss. The lower cost of screen printing and selling of screen printed fabrics as block printed ones have been identified as major problems facing this industry. Mounting competitive challenges in the form of emergence of better quality printing centres in Jodhpur and Meerut at the national level and competition from other neighboring countries such as Bangladesh, Pakistan and China has affected the export prospects of this cluster.

Sasany (2000) in his study on the Applique handicrafts cluster, Pipili, Orissa observed that though the cluster is capable of producing a good number of fast moving items in the market, unfair market practices, weak linkages and

lack of collective effort are found to hinder the development of the cluster. The study also suggests efforts towards product standardization, quality control, building awareness and promotion of collective action and web marketing as the major strategies for improving the competitiveness of the cluster.

Shukla (2000) observed that there is a lack of joint action, deficiency in productivity, high cost of production and lack of quality awareness in the Tussar handweaving cluster of Champa, Chattisgarh. The Weaver's Cooperatives sell 10per cent of their produce to direct consumers and the rest is sold through Weavers Association, Cottage and Handicrafts Emporium, but delayed payments is observed to be a big menace. Although there is a Kosa Business Association existing in the cluster, its activities are limited only to social welfare. No association was formed for the purpose of business management and the entrepreneurs are mainly working with their own self-efforts. Among Kosa products, only about 30per cent of the furnishings and dress materials have any self-designs on them. In saris, 60per cent of the designs are traditional and 40per cent are net or jacquard, which are either prepared by the weavers themselves or given by the Weaver's Service Centres. There is no commercial design centre in the cluster.

Neelavalli (2001) in her study on the Madurai Tie and Dye and Hand printed textile cluster pointed out that the cluster, with its inherent strengths of locational advantages, presence of supportive agencies and active industry association, has a better scope for expansion to national and export markets, provided, product diversification and strategic brand building are prioritised. Apart from the usual threats like low quality substitutes and mill products, the study brings out lack of initiative and awareness, high cost of production and lack of supply of formal finance as the major factors ailing the competitiveness of this cluster.

Arya et al (2001) in their study on the Lucknow Chikan Embroidery cluster say that with its strong 2.5 lakh artisan base the cluster is capable of producing customized products for its customers but the production is both seasonal and time-consuming. Absence of industrial associations, limited

employment of modern design tools, gap between manufacturers and artisans and absence of manufacturing linkages are found to be the major weaknesses of the cluster by the study. Apart from the printed and machine embroidery, advent of Pakistani embroidery and other such similar items is viewed as a potential threat to the prospects of the cluster.

Traditional craft knowledge, easy availability of raw material, use of natural yarn, availability of skilled labour and huge variety of cloth texture have been identified as the major strengths of Maheshwar handloom cluster by Ansari (2002). Though the saris and other dress material of this cluster are popular in major metros of India, the study pointed out the popularity of the products from Chandheri and Banaras pose a competitive threat to this cluster. The study attributes the weakness of the cluster to the lack of promotional activities, use of age old techniques, repeated old patterns and designs, and poor dyeing. Absence of strong unions and common research and development centres, lack of joint business development efforts, lack of market research, lack of product diversification and limited access to credit facilities were found to be the other major factors ailing the cluster. The study emphasizes the necessity of the cluster members to work in co-operation with the various private sector actors and departments for the development of the cluster.

Tewari et.al (2002) pointed out the compliance with labour standard had enhanced the exports of Tamilnadu handloom industry. The study noticed a smaller subset of firms in textiles and garment sector using designer softwares for production of varieties. But the major stumbling block was the prohibitive costs of such modern tools which keeps things out of reach for SMEs. The study advocates support under Technology Upgradation Fund (TUF) for bridging the gap. The study advocates provision of microfinance for easy access to low cost funds and cluster development as effective strategies for alleviating financial and networking problems of SMEs.

Verma (2002) finds that Indian garment exports to the EU and the US, on the whole, to be export competitive. A study on buyers' perception of India as a source country showed that while India was perceived satisfactorily on price,

quality, technology, flexibility, small order quantity etc. it was perceived unfavourably on lead times, responsiveness, communication, trust, meeting contractual obligations, ethical standards etc. While advocating cluster approach for products with export potential to boost competitiveness of textile industry, the study suggests dereservation of knitwear to help bigger players to enter the scene. Placing the major responsibility of structural adjustments and infrastructure development on the government, the study also appeals to continue assisting the handlooms by way of refund the excise duty collected through existing handloom rebate schemes and other existing market assistance schemes.

Gangavkar (2003) attributes the proximity of the Pochampally handloom weaving cluster to the state capital city as a major strength of the cluster in accessing the market. The strong production base, availability of support services, strong presence of co-operatives are the other major strengths of this cluster. Though the cluster's speciality is tie and dye silk sarees, of late, the cluster has diversified to dress materials, home furnishings and wall hangings. But, these products have failed to make a mark especially because of the poor marketing strategies and also, to some extent, due to weavers' resistance to change. High level of ignorance about market information, market promotion strategies, brand building initiatives, absence of quality control and untapped local markets were the major weaknesses observed in the study.

Infrastructure bottlenecks and lack of professional approach are found to be the major hinderers for the development of Karur Home Textiles cluster by Gangavkar (2003). Another special feature observed in this cluster by the study is, the ISO quality certification being obtained by various units which adds to the competitiveness of the cluster. The cluster is observed to concentrate on quota items for export, but the opening up of market due to globalization is perceived to pose severe competitive threats to this cluster from products of China and Pakistan. Though various associations are found to be present in the cluster their role is limited to advocacy. The cluster also plans to have a consortium for medium size exporters and manufacturers. Unhealthy price competition paired

with fluctuations in prices of raw materials and intermediate goods are factors that weaken the cluster efficiency.

Influx of imitations and competition from powerloom and Banaras products were identified to be the major threats to the handloom weaving cluster of Chandheri. UNIDO (2003) in its diagnostic study of this traditional handloom cluster pointed out that inspite of a larger number of orders and the assistance given to this industry, the weaving community, continues to remain impoverished due to the unrevised wage rates. Traders and Master Weavers have been making larger gains on account of increase in the total production of Chandheri. The majority of sales is through direct channels in metropolitan cities, fairs, exhibitions and expositions. With the introduction of contemporary design inputs, strategic market positioning, the gearing-up of the institutional infrastructure and the support to Business Development Service (BDS) providers, the study opines that the Chandheri cluster with its unique product can face global competition by becoming competitive on account of its tremendous potential in niche markets. Absence of social security particularly amongst the average and poor weavers makes them indebted to the upper income groups such as the Master weavers and the Traders.

Nuapatna weavers who settled down to weave exclusively for Lord Jagannath, Puri temple have a marked presence through their skilled craftsmanship for the past eight centuries. Outdated production methods, poor product quality, price fluctuations, lack of product diversification and refusal to shift from archaic marketing modes were identified as the factors ailing the cluster by Gangavkar (2003). Though there are a sufficient number of weavers, absence of weaver associations/NGOs, lesser interaction with support institutions, lack of joint efforts between weavers for profit initiatives and organizations for development issues, and dearth of relevant public service providers were found to hamper the development of the cluster. These features have led to categorization of the cluster as a *latent* (type 3) cluster.

While the proximity to capital city is a perceived advantage for Pochampally cluster, the remote location stands as a disadvantage to Cannore

cluster. The inherent strength of this cluster has been identified by the Textile committee (2003) study, as its capability to process small orders, because of its cottage industry structure; brand image with customers, eco-friendly dyeing process, adaptability and social accountability were the other major strengths of this cluster. The study also lists 20 major problems identified in the cluster, which included low labour productivity, lack of designing capabilities, absence of active industry association, dearth of common facilities and low level of awareness. The study pointed out that, efforts were on, to promote a Cluster Development and Coordination Group for better implementation of the plans under the cluster development scheme.

Building trust and financial stability through Self Help Groups were the primary tasks initiated towards strengthening the traditional Sanganer and Bagru textile handblock printing cluster in Rajasthan. Gangavkar (2004) in the study of this cluster mentions that due to the unfair trade practices in market, the trust and relationship of players at all levels in the market were badly affected. Moreover inability to obtain SSI registration by units due to their location in agricultural lands, prevented many units from availing even basic infrastructural facilities for their units. The business being traditional is managed in-house preventing any professional intervention in this front. Hardly any research is being conducted in production or marketing of the products. Pollution and technological backwardness is also found to be a characteristic feature of this cluster. Initiatives by the Textiles Committee, under the Cluster Development Project are expected to bring out collective action to boost competitiveness of the cluster.

Gangavkar (2004) documenting the cluster development initiatives at Bhavani and Chennimalai Home-furnishings cluster, highlights the awareness creation through workshops, technology training, field visits and experience sharing as the major strategies that have addressed the felt need of lack of awareness in the cluster. Other initiatives recorded in the study include, initiation of activities to build Bhavani textile processing park for small dyeing units, formation of Cluster Development and Coordination Group, encouraging

industry associations to have professional executives, advocacy among the industry associations to formulate and adopt 'Common Minimum Programme' to benefit the member units, setting up of common facilities like resource centres and quality clinics, promoting consortium for private sector and cooperative sector in Chennimalai, etc. A common website for industry operators to showcase their products online had been launched paving way for easy access to offshore markets.

Gangavkar (2004) presented a detailed SWOT analysis of the Panipat Home Textile cluster. Though there is a presence of an array of support institutions, the cluster due to its inherent weaknesses like unorganized units and lack of awareness, could not harness the desired benefits. Stiff internal competition, infrastructure bottlenecks, unorganized units, price fluctuations, lack of awareness of export procedures and nuances of export marketing and absence of market study were found to be the characteristic features of this traditional weaving cluster. Many initiatives by the Textiles committee to address the felt needs of the cluster and bridge the gaps identified in the cluster are also listed in the paper which include sensitization programmes, exposure visits, buyer-seller meets, formation of export consortiums and raw material banks and facilitation to obtain ISO quality certification.

Industry specific initiatives and sustained support have helped the Salem Textile cluster in its process of internationalization observed Gangavkar (2004). Salem cluster is dominated by powerlooms numbering to 2 lakh units and also a presence of traditional handloom weaving with 25000 units under operation. In spite of its high export potential, the cluster suffered from dearth of forward integration into garmenting, inadequate brand name and weaker associations. Specific initiatives have been undertaken by Textiles committee by promoting consortia for dyers for bulk sourcing of raw materials, consortium for tiny and job workers to help them graduate to establishment of their own units, facilitation for establishment of forward integration into garmenting by women groups, demonstrative experiments in association with the industry to reduce the communication costs by 50 per cent, initiating the establishment of Salem



Exporters Association (SEA) and obtaining 'Made in Salem' mark by registering under Geographical Indication registry to build the brand of Salem cluster. Establishment of linkages with UK Trade Desk for sourcing latest technology and Japanese External Trade Organisations (JETRO) are identified to be the steps towards boosting technological competitiveness and internationalization of the products of this cluster.

Niranjana (2004) presenting a micro-level analysis in the cases of Chirala, Yemmiganur and Koyyalagudem/Tenali handloom weaving clusters observed that success of weaver cooperatives had not been uniform; the main reasons being, local lobbying for power, political interference, key controls held by master-weavers and sheer mismanagement. The failure of APCO, the apex of weaver cooperatives by ways of default in payment for three years and refusal to lift fresh stocks resulting in weaver deaths has been highlighted in the study. While the case of Koyyalagudem's reliance on exports showed that it creates instabilities in demand, production and work opportunities, the case of Tenali highlights the marketing possibilities in local contexts as well.

Sarkar Ed.(2005) recording as a case study, the UNIDO experiences of developing the Kannur Handloom cluster, pointed out that networking of 48 co-operative societies (constituting the important production segment) into 4 consortia had helped the member societies in doubling their earnings and enhancing their cost competitiveness options. Several unique interventions have been pursued by the implementing agency, Directorate of Handlooms by initiating the consortia to establish facilities like common marketing outlets, common procurement centres, availing services of national and international business development service providers, organizing fairs, providing training inputs on weaving and dyeing techniques, etc. Further strengthening of the cluster has been planned through registration under Geographical Indications (GI) Act, brand promotion with the assistance of the Indian Institute of Management (IIM, Calicut), capacity building in the area of packaging/export-import management, as also common procurement of specific raw material and dyes and chemicals are also on the anvil.

Element of doubt, lack of local contribution, problems with local cluster co-ordinator, Problems with designers, illiteracy and its compounding effect, problem in sending samples, FCRA approvals figured as the major problems in a study by Rajveer (2005) about the experiment of direct marketing of the products of four artisan clusters using internet viz., Chanderi Sarees, Saharanpur Woodcraft, Moradabad Brassware, and Firozabad Glassware. The major milestones of the methodology were established in four 6-month segments: building trust and understanding key marketing issues; getting the artisans involved, experimenting with ICTs and marketing inputs, and providing training; providing technical training, targeting ICT marketing, creating websites, and initiating catalogue-based marketing; and collecting more market information and designing inputs, organizing dissemination and publicity, and trying out the online order system. The fact that Chanderi, which is not easily accessible even by road, has reached an international market place is a remarkable achievement. Out of the total of seventy-five general enquiries, Firozabad received the highest number of enquiries (thirty-five) and Saharanpur the lowest (six). The fact that the Saharanpur website did not have many members at the beginning may partly explain why fewer products enquiries were received. Awareness level was found to have increased from low to medium and high levels.

Textiles Committee (2006) detailing the success of cluster specific interventions in the Pochampally handloom weaving cluster had attributed sustained efforts with strategic plans and targets as the major reason for the success. The Pochampally cluster, categorized as a natural and type 3 cluster, due to the interventions has turned into a vibrant hub of handloom activity. One major achievement of this intervention is making Pochampally Ikat design, the first textile craft to obtain registration under Geographical Indications Registry, Government of India, which will help in protecting its products from 'unfair competition and counterfeits'. As on May 2005, two consortia have been formed with 6 member/shareholders each, one for the domestic market and the other is an export consortium called 'Ikat Art'. Selected group of SMEs are trained as

prototypes in terms of modernization to participation in apparel parks. A Centre for Handlooms and Artisans Information, (CHAI), which is a marketing-cum-intelligence centre at Pochampally, is run by Sanghamitra, a local NGO and was formed with the intervention of Textiles Committee.

### **Studies on Kanchipuram Cluster:**

Arterburn (1982) giving a descriptive account of, what makes co-operatives succeed, highlights the success of co-operative movement in Kanchipuram. He observed that while co-operatives in India have largely been government initiated, the co-operative movement in Kanchipuram was an outgrowth of the labour movement in the handloom industry. Describing the growth evolution of Cooperative movement in Kanchipuram, he states that the growth of cooperatives has led to greater involvement of government in the industry resulting in a larger inflow of capital, publicity and expansion of markets. He ascribes the success of the co-operatives to four factors viz., (i) inherent profitability of silk weaving, (ii) coordinated package of assistance by the government addressing the technical, capital, raw material and other needs of the weavers, (iii) structural organization of cooperatives, ensuring a balance of power between the secretary, board of directors and the members, preventing abuse of power and (iv) active participation of weavers in the affairs of cooperatives.

SRUTI (1995) in its study on the artisans of India, highlights the plight of weavers in India. The study observed that though a large number of women were employed in the sector, very few work on the loom, except in the North-East. It reports that the basic crisis of handloom workers is the loss of their traditional markets to the industrial and powerloom sectors. This has not only affected the handloom weavers, but even more profoundly women and children involved in the pre-loom activities like spinning, carding, sizing and warping. The problems are aggravated by shortage of good quality raw materials. The study also pointed out to an important disadvantage of the industry being its inherent inability to produce cloth of standardized quality and designs, in the era

of mass production. The study attributes the reduction in demand for handloom products to the higher price, inability to maintain uniform quality and design and growing preference for synthetics. The study noticing the inadequate dissemination of improved loom technologies and upgradation of pre-loom process technologies, cautions that given the other constraints, mere infusion of technology alone cannot make a difference. The notorious role of intermediaries in controlling raw materials, market and even credit has been highlighted in the study.

Babu P Remesh (2002) recording his observations on Organising and Empowering Rural labour in Kancheepuram, outlines that there had been a number of impediments and challenges in organizing rural labourers. The differing perceptions and priorities among labourers, dominance of caste feelings, gender differences preventing women from assuming key positions and leadership, political interference, apathy of government agencies and self centered motives of labour activists were identified to be the major hurdles in organizing labour in Kanchipuram district.

Bowonder et al. (2005) reported that introduction of computer based designing in Kanchipuram Silk Cluster had revived the prospects of this traditional cluster by reducing the production time, offering wider choice of design, visual simulation of design and colour combinations and increasing the earnings of the weaver for weaving complex designs. The gaining popularity of the technology among the SME segment is another interesting feature noticed by the study. The study also attempted a SWOT analysis of the Kanchipuram Silk Cluster and discusses the critical success factor of this phenomenon.

Nandakumar (2005) observed that internationalization of the Kanchipuram Silk Cluster requires handholding, training, personal contacts and direct assistance in terms of reaching the cluster with information and communication technology (ICT) tools and management techniques. While exports were confined to traditional product lines like sarees, outer skirts in silk and churidhars, the channel is through middlemen or merchants/traders from Chennai and Bangalore, which resulted in lesser profits for the cluster. With

new additions to product line like scarf, stoles, tops, upholstery, curtains, embroidered wall hangings, the possibility of export market expansion is high, says the study. While tracing the historical origins of this traditional industry, the study had also attempted mapping of stakeholders and good practices in the cluster.

Joseph et. al (2005) documenting the experiment of FOOD, a Chennai based NGO, observed that establishing an e-commerce site and developing the e-marketer concept has helped women's co-operatives and NGOs increase their revenue and the scope of their market. The experiment featuring artisan products from four districts included Kancheepuram silk sarees, wooden handicrafts, wooden wall hangings, jute wall hangings, jute bags, copper products, paintings, curios made out of sea shells, and papier mache toys. Running this live e-commerce website enabled FOOD to experiment with the various components that go into an e-commerce store, such as site design, secure technologies for shopping, credit-card authorization, and delivery of products and supplies. From these experiences, FOOD found that the success of an e-commerce site largely depends on securing the trust of the users — who are more comfortable with “offline” shopping experiences.

#### **Identification of the research gap:**

A comprehensive review of the above literature has thrown light upon various issues facing the traditional SME clusters viz., issues of competitiveness, internationalization and globalization. The studies reveal that the problems faced by traditional SME clusters in these areas are almost similar. While highlighting the critical success factors of various SME clusters in these fronts, the studies also give a comprehensive list of lessons learnt across different milieus.

The available literature has dealt in length the issues facing the SME clusters/handloom clusters in various parts of India. At the macro level there are many studies that concentrate on SME clusters and their competitiveness. There are comprehensive studies on the garment sector, handlooms and

handicraft clusters across the country. It is important to note that the studies specific to traditional artisan SME clusters have been a few in number and there is an explicit dearth of studies on Kanchipuram silk weaving cluster. Thus, a gap is identified in the literature.

**Justification for the present study:**

The irony of excluding the Kanchipuram cluster which employs thousands of weaver households directly and numerous support services indirectly, strikes a note of caution. The dynamism of the cluster has made it survive successfully through ages. With such a grand historical lineage, employment potential and scope for internationalization, it becomes inevitable to carry out serious research in the cluster. A closer observation of the studies on Kanchipuram silk cluster reveals that they have dealt with cooperatives, status of weavers, issues of labourers, intervention of ICT in the cluster, lack of management inputs, etc. A comprehensive study of this Kanchipuram cluster, dealing with the aspects of competitive advantage, mapping the cluster stakeholders, analyzing their linkages and the cluster dynamics, is not available. The present study is intended to fill this gap in research.

Kanchipuram Silk MSME cluster is a traditional cluster, which has been surviving through ages with its own resilience and vulnerability, employing thousands of dexterous weavers by carving a niche for itself in the market. Though the cluster has survived for ages there is a rising threat to its future survival due to the changing trends in the business environment. With the advent of Chennai-based textile retail majors, both the production base and markets of the cluster are shifting, threatening its future survival. Still the cluster products command a special place in the minds of consumer. There is a necessity to study the competitive advantage, map the cluster stakeholders, and analyze their linkages, in order to chalk out strategies for boosting the competitive advantage of the cluster. Hence the study has been pursued with the following objectives.

#### **Objectives of the study**

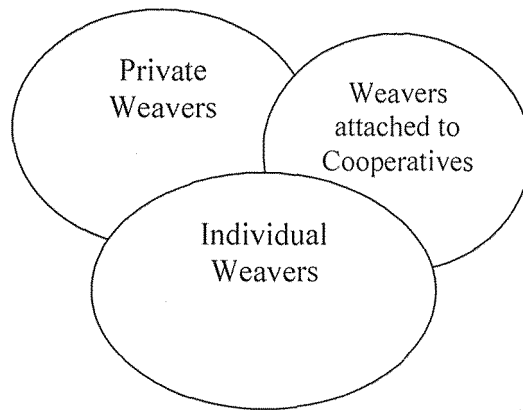
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The major objectives of the study were

- To review the progress of Silk Weaver Cooperatives functioning in the Kanchipuram Silk Weaving Cluster
- To study the business operations of the principal production system of weavers and master weavers/retailers in the Kanchipuram Silk Weaving Cluster
- To identify, map and analyze the linkages of the stakeholders in the Kanchipuram Silk Weaving Cluster
- To study the cluster dynamics in terms of knowledge transfer and operation of the diamond theory of competitive advantage
- To attempt a SWOT analysis of the cluster in terms of its markets, technology, innovation, skills and business environment.
- To document good and innovative practices, and problems at grassroots level of the cluster in the form of case studies
- To suggest suitable policy measures for strengthening the linkages among stakeholders for developing the competitive advantage of the cluster

## Methodology

The study is descriptive and was conducted in Kanchipuram. The study has adopted a multi-stage random sampling. The Kanchipuram silk cluster consists of both private weavers (independent and attached to master weavers) and weavers attached to the Cooperative Societies. Though the weavers were attached to a private master weaver or cooperative society, due to lack of continuous orders, they resort to individual weaving. The weavers also entertain individual orders that they directly receive from the customers for occasions like festivals and marriage. Since weaving is a household industry, a minimum of two to three other members of the family had knowledge of weaving and were involved in the production process. So at times, in the case of weavers attached to cooperatives, when the looms are free, they were utilized by other members of the family for weaving the orders they receive from private sources. Thus, there was a difficulty in classifying the weavers into water-tight compartments.



In the first stage, the weavers were classified into those belonging private sector (independent and attached to master weavers) and the ones attached to the Cooperatives. There are about 21 Silk Weaver Cooperative Societies, functioning in Kanchipuram with a membership of about 19893 weavers. Only the Cooperatives sector is organised in the cluster, the lists of weaver members were obtained from the Silk Weaver Cooperative Societies.



The weavers attached to Cooperative Societies were further classified to active and inactive weavers in the second stage. From the list, the active weaver members (who were in weaving continuously for the last six months) constituted the sampling universe, which were 11384 in number out of the total number of 19893 weavers.

In the third stage, to arrive out at the size of sample, the annual production of weaver members was aggregated and the mean and standard deviation of the population was calculated. The standard deviation worked to be very less ( $\sigma = 2.8$ ); which accounted for a minor deviation in the population.

Though the Cooperative Societies were 21 in number, they were functioning under the administrative control of a single agency called the Office of Deputy Director (Handlooms). Hence they were all governed by the same rules and regulations and they observed typically the same set of functions. This has blurred completely the difference between the Cooperative societies. The products produced by the members were also highly homogeneous. All the members of all the cooperatives were entitled to the same set of benefits and schemes.

Due to this high degree of homogeneity, it was decided to restrict the sample size to one percent of the universe i.e., active members, which numbered to 115. An equal number of respondents were chosen in the private sector to strike a balance.

Apart from these, about 30 retailers / master weavers have been chosen by using the 'snowballing' technique, since there was no published data available about them. Only an informal estimate by the two traders association with a membership of hundred each was considered to be the population of retailers in the cluster. Since it was necessary to elicit information on the problems of the cluster in production and marketing aspects, members who were opinion leaders and had a good understanding of the overall perspective of the industry were purposively selected for the study.

Apart from these, Director (Handlooms), Director (Textiles), Managing Director (Tamilnadu Handloom Development Corporation), Chennai, Deputy Director (Handlooms), Kanchipuram, officers of the 20 Silk Weaver Cooperative Societies, Director of Anna Silk Exchange, Manager, Karnataka Silk Marketing Board, Zonal Officer of Silk Conditioning and Testing House, Sirukaveripakkam, Tamilnadu Zari Limited, Orikkai, Weavers Service Centre, TANSILK, Co-optex, Office bearers of Kanchipuram Silk Lace Saree Manufacturers Association, Kanchipuram Silk Sarees Small Producers Association and Kanchipuram Silk Zari Traders Association were interviewed to gain overall understanding of the cluster and their specific roles in the cluster.

#### **Sampling Plan:**

Particulars		Universe	%	Sample	Details
Weavers	Cooperatives	11384	1	115	
	Private			115	
Retailers		200		30	
Cooperative Societies				20*	
Other Supporting agencies				13	(Anna Silk Exchange, KSMB, Tamilnadu Zari Ltd, Weavers Service Centre, DD handlooms, SCTH, Zari Association, Traders Association 2, Joint Director (Textiles), Joint Director (Handlooms), MD (TNHDCCO), Cooptex)
Total Sample				<b>293</b>	

\* Out of the 21 societies permission to visit Bharathiar Society was not granted on administrative grounds.

#### **Nature of the study and data:**

The study is descriptive. It is based on both primary and secondary data.

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The primary data were collected through unstructured interview schedules. Three separate interview schedules were constructed, pilot tested, fine tuned and employed for collecting data from the weavers, retailers / master weavers and associations. Focused Group Discussions (FGDs) were conducted with weavers, service providers, support agencies,' officials of Weaver Cooperatives, government officials, researchers, technical experts, academicians and NGOs which gave much insight, added perspectives and helped to gain deeper understanding of the field realities. Case study technique has also been adopted to highlight the qualitative aspects. The secondary data were collected from published sources like annual reports of cooperatives, government documents, gazetteers, research reports and websites.

#### **Period of the study .**

The field study was conducted between April 2006 and May 2007.

#### **Tools of analysis:**

Since the handloom industry is unorganized, except in the case of cooperatives, there is a dearth of documented data. The share of cooperatives in the Kanchipuram Silk cluster is estimated (informally) to be one-third of the whole size of the industry. Hence, the published data with the co-operatives are only indicative and does not reflect the whole feature of the industry. Hence the findings cannot be generalized. Two-thirds of the industry, controlled by master weavers and retailers has no organized set of data, hence it shall be difficult to get any meaningful results. To strike a balance of both pre-dominantly qualitative tools have been utilized for analysis of the cluster.

In the case of primary data collected from respondents, the data were processed using MS-Excel and SPSS 11.5. Statistical tools like correlation, Chi-square, AN OVA and Multiple regression analysis have been employed for analysis of data.

In the case of secondary data, growth rate has been employed to find out the rate of growth in financial indicators like net profit, production, sales, membership, cash credit, etc.

For qualitative analysis, the study has adopted methodology of UNIDO Cluster Development Programme. The tools developed by UNIDO like Cluster Cooperation matrix, Cluster map, Measuring Linkages, Overall Cluster analysis, Cluster selection matrix, broad typology of cluster matrix, etc., have been utilized for the study.

About twelve case studies mapping good and innovative practices, problems at grassroots and implementation of policies in the cluster have been documented by the study. A SWOT analysis for the cluster has also been attempted by the study.

Participatory Rural Appraisal (PRA) tools like Timeline analysis, seasonal calendar analysis and Venn diagram analysis have been employed to strengthen the overall analysis of the cluster.

Given the historical background of the cluster, with an inquisitiveness to trace the origins of the silk weaving industry in the cluster, the deciphered volumes of historical inscriptions of ancient times have been studied, with a view to find out the references of weavers. The sources at the libraries of Archeological Survey of India, Chennai and Tamilnadu Archives, Chennai were approached and references were collected and a chronicling of major developments in the cluster has been attempted in the study.

### **Chapterisation**

- Chapter 1 gives an overview of the status of handloom industry, concept of clusters, status of cluster development in India and a brief introduction of the Kanchipuram Silk Weaving Cluster.
- Chapter 2 presents the review of Indian and international literature on MSME and handloom clusters. This chapter identifies the research gap and issues for investigation. Research design has also been explained in this chapter.

- Chapter 3 traces the growth evolution of the Kanchipuram silk weaving cluster through ages
- \* Chapter 4 examines the quantitative growth of the silk weaver cooperatives in terms of membership, production, sales, net profit, cash credit, etc.
- Chapter 5 features the socio economic profile of the weaver and masterweavers/retailers, their production and marketing linkages, financial sources, aspects of training, major problems faced in production and marketing, etc.
- Chapter 6 presents the existing Cluster Map which maps the stake holders and analyses the linkages using qualitative tools like Cluster Cooperation matrix, Measuring Linkages analysis, Overall Cluster analysis, Cluster selection matrix, typology of cluster matrix, etc. The analysis on the aspects of knowledge management and operation of the diamond of competitiveness in the cluster are also presented in this chapter.
- Chapter 7 furnishes seasonal calendar, Venn diagram analysis and SWOT analysis of the cluster
- Chapter 8 furnishes the findings, conclusions, suggestions, proposed cluster map and the logical framework for cluster development in Kanchipuram.

### **Section III: Profile of the Study Area - Kanchipuram**

#### **Kanchipuram - Physical Features**

Kanchipuram town is located in the Southwest direction at a distance of 76 kms from Chennai. It is situated at 12° 50' North Latitude and 79°42' East longitude. The town has an average elevation of 275' (83-82m) M.S.L. The main land lies on the northern bank of the holy river Vegavathi, a tributary of the river Palar.

செங்கல்பட்டி அரக்கணம் பஞ்சாயத்து

The town is well connected by rail and road with the adjoining urban centres, viz. Arakkonam, Chengalpattu, Arcot and Vandavasi. The Chengalpattu Arakkonam broad gauge railway line passes through this town. Apart from this the great western trunk road from the Chennai to Bangalore also passes. Vegavathi River traverses from west to east of the town and it also divides it into two parts.

### **Climatic conditions**

The temperature throughout the year is high, reaching a maximum of 37.50°C average in the month of April to July and recording of minimum average of 20.5°C temperature during the months of December to February. The prevailing wind direction is South West in the morning and South East in the evening. The town gets rains from both South West and North East monsoon. Average annual rainfall of the town is 40" or 1125 mm.

### **Soil**

Predominant soils found in the area are Black, Red loam, Clay and Sand. The town has a natural slope from West to East with a fall of 42 ft.

### **Heritage background:**

Kanchipuram has to its credit a grand historical lineage which has been presented in detail, in the Chapter 3 - Section Kanchipuram Silk through Ages.

### **Growth of Population**

Kancheepuram town had a population of 1,10,657 in the year 1971, 1,31,013 in the year 1981 and 1,44,955 in the year 1991 as per census. The population of the town has shown an increase of 31% over the decade 1971-1991. The growth of population of Kancheepuram town and decennial variation since the year 1901 are given in the table below

கன்கேப்பூரம் க்க Kancheepuram க்க்க

Year	Population	Variation (%)
1901	46,164	
1911	53864	16.68
1921	61376	13.95
1931	65258	6.32
1941	74,685	14.37
1951	84,810	13.65
1961	92,714	9.32
1971	1,10,657	20.53
1981	1,31,013	18.4
1991	1,44,955	10.64
2001	1,53,140	5.65

Source: Census of India

Since 1951 the population of the town has gradually increased. The increase in population is attributed to the spurt in commercial activities.

#### Population density

The population density of the local planning area is 17 persons / hec and for the town is 114 person/hec as per 1991 census. The maximum residential density occurs in bazaar area and surrounding temples. The minimum residential density occurs in the rural area

#### Land use:

The residential area of the town is 416.04 hectares, which constitute about 43.96% of the total area of the town mostly concentrated around the temples. The town possesses about 100 temples both big and small, which are scattered around the town. In the area near Ekamreshwarar and Kamakshi amman temples the predominant land use is mixed residential. The residential development on the northern side is limited by the municipal boundary and also by the Railway line, which passes through the northern part of the town. In the southern side of the town the residential development is parallel to Vegavathi River. The residential area developed in the South Eastern direction in the area surrounding the Varadharaja Perumal temple. The other predominant residential areas are near Singaperumal Koil and Near Krishnarayan street in the South.

The commercial area of the town occupies 62.03 hectares i.e., 6.58% of the town area. The important commercial area of the town are mainly concentrated around Sangusapet, Ennaikara Street, Kavarai Street, Nadu Street, Gandhi Road, Mettu Street, Sengaluneer Odai street, Raja street, Salai street, Kamarajar Road and almost continuously along the Gandhi road from the junction of the Kamarajar Road. Along the Railway station feeder road commencing from the junction of Gandhi Road, there is a tendency of continuous commercial development. Commercial area seems to have developed with the temple as nucleus and nearby the Sengaluneer Odai street and Raja street because of the Kamakshi Amman temple. The commercial development in Kamarajar Street is purely due to location of bus stand. The commercial development of Gandhi Road is because it forms a part of major thoroughfare, connecting Chengalpattu and Arakkonam. There are 5 markets in existence including one private and one exclusively for flowers and garlands.

#### **Municipal area**

In the town industrial area occupies 65.37 hectares i.e, 6.90% of the total area. The major industries in the town are influenced by the Handloom Spinning, Silk weaving, Dyeing and rice production. 30,892 handlooms are located within the town and in the vicinity area. The other industries are printing press, metal works, general and engineering works of small nature. Only SSIs are located within the town.

#### **Non-Municipal area**

An extent of 104.13 hectares of land is covered by the industrial use with in the vicinity area. The main industries within the vicinity area are one Roller flourmill, industrial estate and some rice mills. Rice mills are located in Erivakkam, Sirukaveripakkam, Netteri, Thimmasamudram and Achukkattu villages, which are nearby the town.

#### **Industries:**

Kanchipuram is one of the most important manufacturing centres in India for Handloom goods, particularly Silk sarees. The Kancheepuram silk sarees



command worldwide reputation for its artistic craftsmanship. Apart from this metal working handicrafts in small scale also exist. Tourism is also another major industry in the town.

### **Commerce:**

The major commercial activity is Silk saree sales which is spread across Sengaluneerodai street, Raja street, Salai street, Kamaraj street, Gandhi road, Mettu street, Bavapettai and Old Railway station feeder road. State KVI Board has one product centre at Kanchipuram, has 75 looms in surrounding villages and produces silk sarees worth Rs.10 lakhs per year. Tamilnadu Sarvodaya Sangh have got six silk production centres in the town, Tamilnadu Sarvodaya has 150 looms in operation in the surrounding villages and produces over one crore worth sarees per year. There are various other silk cooperatives and 2 power loom units the value of production being Rs.7.25 lakhs per month.

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### Chapter 3

#### **GROWTH EVOLUTION OF KANCHIPURAM SILK CLUSTER**

Weavers have always occupied a very important place in the society since very early times, since clothing is one of the basic needs of man. The weaver and the loom are mentioned in classical Indian texts such as Rig Veda and Atharva Veda. In these texts, gradual spreading of darkness and light over the earth is likened to the weaver throwing a shuttle on the loom. 'Tan?' is the Hindi word for loom, and the weaver in many parts of the country is known as *tanti*. In the mythological texts, Lord Vishnu is often portrayed as *Tantuvardan*, or the divine weaver, who wove the rays of the sun into a garment for himself. Evidence of madder-dyed fabrics was found in Mohenjodaro and Harappa. The *Sangam* Classics (1 B.C. to 6 A.D.) record the weaving of silk and cotton cloth. The Sanskrit epigraphs of the succeeding periods point to the high position accorded to them. Kanchipuram, being a place of historical importance, has a recorded history from the periods of ancient Indian era. The silk city, finds a special mention in the *Sangam* classics, travel accounts of the famous foreign travelers like Fa-Hien and Hieun Tsang, rock edicts, inscriptions and epigraphs in Tamil and Sanskrit. Being a capital city, a popular place of pilgrimage and one of the ancient cities (nagaram), Kanchipuram, has carved a *niche* for itself in the pages of history as an important seat of higher learning (*Ghatikasthanam*).

Kanchipuram, earlier known as Tondaimandalam, has been an important city from the period of Mauryan dynasty. It has been the capital city of various South Indian dynasties.

With the association of such a grand royal lineage there is no doubt, about the prominence that weaving would have enjoyed, due to the patronage of these princely classes. While studying the evolution and growth of this silk weaving industry in Kanchipuram, it becomes imperative to walk through the lanes of history to track its grand lineage and the changes that have occurred in the industry over a period of time. A chronicling shall be of great use in gaining insights into the cause and effects of various happenings in the industry. It shall be of interest to a larger mass to explore the lengthy past of this artistic industry.

A humble attempt is made in this section to chronologically organize the bits and pieces of data, with a view to obtain continuity, in understanding the evolution of the Kanchipuram Silk Weaving cluster and the milestones that it had come across on its pathway. Important historical evidences, recording the presence of weaving in the area have been quoted, which shall be of great interest to the readers. While the historical events have been given, in detail, at the beginning the recent developments at the turn of the 20<sup>th</sup> Century have also been covered, which had an impact over the industry in gaining its present structure.

**Kanchipuram Silk Cluster through the Ages**  
From 1<sup>st</sup> Century B.C. to 21<sup>st</sup> Century **A.D.**

Year	Historical Landmark
1 B.C. — 6 AD	Mentions in Sangam literature about the artistic weaving of silk cloths by skilled weavers of this region
575 AD - 600 AD	Reign of Simhavishnu of Pallava dynasty. Vilavatti <b>inscription</b> - The record is dated in the 10th year of the king in the month of Sravana, su., panchami and registers a royal grant of the village Vilavatti in Munda-rashtra with all the taxes due on it, to Vishnuserman of the Gautama-gotra and the Chhandoga-(sutra), for securing long life, strength of arms and victory to the king. This is a copper plate grant of the Pallava king Simhavarman, engraved in archaic characters on five plates strung together by a ring bearing a circular seal with the Pallava emblem of a couchant bull facing the proper left and another figure resembling an anchor above it. From this record it is learnt that the king collected taxes from metal and leather workers, cloth-dealers, rope-jugglers or dancers, Ajivikas, water-diviners, weavers, gamblers, barbers, etc., It mentions the tax which was collected from weavers as <i>tantuvaya</i> .
1110 AD	A Tamil inscription on the north wall of Kanchipuram Sri Ulagalanderumal temple recording the visit of Kulotunga - I to the temple with his two consorts Adittan Kampamadeviyar @ Tribhuvanamudaiyal and Adittan Andakuttiyar @ Anukkiyar Cholakulavalli, specifies that the king made a gift of land to the temple which belonged to the temple but were owned by the weavers. Since the weavers weren't cultivating them, the king resumed the lands and made a gift of them to the temple again.
1172 AD	A Tamil inscription on the west wall in the central shrine in the Tiruvirattanesvara temple of Kanchipuram, inscribed during the reign of Trib. Rajadhirajadheva (Rajadhiraja - II) of Chola dynasty. It records the gift of gold and lamp-stand by a weaver for burning two twilight lamps in the temple.
1270 AD	A Tamil inscription on the south base of Kanchi Sri Jvarahareswara temple records the royal order of the Telugu Choda king Tribh. Vijaya Gandagopala marking the <b>tax on looms as gift to the temple</b> of Suravattarmudaiyanayanar in the city (nagaram) Kanchipuram in Eyirkottam, a district of Jayangonda-cholamandalam by the Pallava chief Tipurasar Nallasittarasan of Ambalur.
1873 AD	Mentions about the silk and cotton fabrics woven at Kanchipuram (Conjevaram) in the Account of Silk in India, compiled by J.Geoghegan.

1905 AD	First Weavers' Cooperative Society was set up in Madras (Chennai)
19 <sup>th</sup> April 1942	Establishment of Kanchipuram Silk Weavers Cooperative Society, the first ever Silk Weavers Cooperative Society in Tamilnadu region (the then Madras Presidency)
1944	Establishment of a cotton weavers' union by Mr.Parthasarathy (a weaver by himself) named as Tamilnadu Provincial Handloom Weavers' Federation'
1947	The Government of India instituted an inquiry into the working conditions of the handloom workers in 1947 due to the active pressure built by the Tamilnadu Handloom Weavers Federation
1953	Establishment of Kanchipuram Silk Weavers' Union with the active involvement of Mr.Parthasarathy
1954	Decision by 'Master-Weavers' to cut the wages of their dependent weavers as an act of discouragement of union activities
1954	The union and Mr.Parthasarathy launched massive protest and signature campaign against this oppressive wage-cut. Presentation of a memorandum to the Minister for Labour accompanied by a notification of a strike. Launch of 'gruel-tanks' for serving the hungry weaver households. Failing of talks and weavers struck work for 15 days to: prevent any further wage cut secure state funds for establishment of silk weavers Cooperatives press for the establishment of Cess Funds for these Cooperatives
3 <sup>rd</sup> March, 1955	Establishment of the first Co-operative - Kamakshi Amman Silk Weavers' Co-operative Production and Marketing Society with state assistance and a membership of 124 weavers. The assistance extended from the Cess Fund included a subsidy of Rs.20,200/- for purchasing weaving appliances; a loan of Rs.26,575/- as contribution towards share capital; and a working capital loan of Rs. 1,32,500/-. The present membership of the Society is 1377.
12 <sup>th</sup> November 1955	Establishment of Kanchipuram Silk Handloom Weavers Marketing Society with 106 master weavers as its members, exclusively to market their produce and facilitating continuous production by sanctioning 75% of the value of produce submitted for sale, as loan. The present membership is 810 master weavers.
1956	Kanchipuram Silk & Zari Textiles Manufacturers Association was founded with 30 traders as its members
2 <sup>nd</sup> February 1957	Establishment of Kanchipuram Murugan Silk Weavers Cooperative Society which is presently celebrating its Golden jubilee year. Presently it has a membership of 2599 weavers.
1958	Establishment of Weavers Service Centre, an establishment by Ministry of Textiles & Handlooms, Government of India to disseminate knowledge on designing, dyeing and weaving.
26 <sup>th</sup> June 1959	Establishment of Cooperative Training Institute in Kanchipuram
24 <sup>th</sup> December 1962	Establishment of Thiruvalluvar Silk Weavers Coop. Society with 203 weavers as its members. Present day membership of the society is at 2053.
30 <sup>th</sup> January 1964	Establishment of Sri Varadarajaswamy Silk Weavers Coop. Society. It has presently 1116 members on its rolls.
10 <sup>m</sup> September 1964	Establishment of the Madras Handloom Finance Corporation under Companies Act 1956, which later was renamed as Tamilnadu Handloom Development Corporation to promote, aid and assist the rehabilitation, growth and development of the Handloom industry in general and, in particular of that sector of the Handloom industry which is outside the co-operative sector in Tamilnadu.

24 <sup>th</sup> February 1968	Establishment of Kanchipuram Pallavar Silk Weavers Coop. Society. Its present membership is 898.
1969	Inception of Office of Deputy Director of Handlooms in Kanchipuram
22 <sup>nd</sup> May 1971	Establishment of Arignar Anna Silk Weavers Coop. Society with 64 members. Its present day membership is 1884.
6 <sup>th</sup> December 1971	Establishment of Tamilnadu Zari Limited by the Government of Tamilnadu with the objectives to produce and supply Zari to cooperative handloom weavers' of the silk industry in the State and to provide protection to the silk handloom weavers' cooperative societies in the State
30 <sup>th</sup> November 1972	Establishment of Mamallan Silk Weavers Cooperative Marketing Society which later turned to be a Production & Marketing Society. The current membership stands at 718.
1973	Establishment of Kalaignar Karunanidhi Silk Handloom Weavers Coop. Society, which at present has a membership of 1645.
16 <sup>th</sup> April 1975	Establishment of Senthamizh Selvar C.V.M.Annamalai Silk Handloom Weavers Coop. Society which currently has a membership of 1133 weavers
27 <sup>th</sup> May 1975	Establishment of Kanchipuram Vallalar Silk Weavers Coop. Society, which currently has a membership of 1576 weaver members.
25 <sup>th</sup> July 1976	Kanchipuram chosen for the implementation of Intensive Handloom Development project.
1 <sup>st</sup> June 1978	District industries Centre established in Kanchipuram to address the growth requirements of small scale and tiny industries of the district.
29 <sup>th</sup> September 1979	Kanchipuram Cooperative intensive handloom development project registered as a Cooperative society under the Cooperative Societies Act, with the main objective of improving the handloom industry and the economic condition of weavers. The proposed methodology was to admit the weavers as members of the project, supply them yarn and other raw materials, establish dyeing houses for yarn-dyeing and market the entire produce of the weavers. The total project was envisaged at a cost of Rs.79.45 lakhs (Rs.52.34 lakhs as loan component and Rs.27.11 lakhs as subsidy component).
1 <sup>st</sup> October 1979	Kanchipuram Cooperative intensive handloom development project commissioned.
9 <sup>th</sup> September 1978	Establishment of TANSILK - the Tamilnadu Cooperative Silk Producers Federation limited for centralized procurement of quality silk yarn and ensure regular supply for the production requirements of the Silk Weaver Cooperatives. Started with a membership of 648 members (238 A class, 409 Associate members and Tamilnadu State Government as a member)
1979-80	Centralised Purchase Committee, a 20 member committee under the chairmanship of Director (handlooms) established
7 <sup>th</sup> July 1980	Establishment of Kanchipuram Sri Krishna Silk Handloom Weavers Marketing Society with 230 master weavers as its members exclusively for marketing the produce of master weavers and to extend financial assistance to their working capital requirements. Presently the Coop. Society has a membership of 715.
1980	Establishment of Karnataka Silk Marketing Board branch office at Kanchipuram to facilitate easy supply of yarn
1981	Establishment of All India Handloom and Handicrafts Board with separate offices for the Development Commissioner (Handlooms) & Development Commissioner •(Handicrafts). The Board is the principal advisory body to both the Development Commissioners. The institutes of Handloom technology and the Weavers Service Centres function under the supervision of the Development Commissioner (Handlooms).



1982	Government Silk Farm established at Vichanthangal 7 kilometres away from Kanchipuram <i>en route</i> Uthiramerur in an area of 7.23 acres later expanded to 8.05 acres
17 <sup>th</sup> July 1982	Office of the Assistant Director of Sericulture established in Kanchipuram
10 <sup>th</sup> January 1985	Establishment of an all women silk cooperative called Annai Kasturibai Women Silk Weaver Cooperative Society. The society currently has a membership of 118 women weavers.
2 <sup>nd</sup> April 1987	Establishment of Dheerar Satyamoorthy Silk Weavers Cooperative Society with 89 weavers as its members.
1989	Kanchipuram Zari Traders Association comes into existence with 25 zari traders as its members.
September 1989	National Cooperatives Development Corporation sanctioned Rs.47 lakhs as clean/redeemable share capital to TANSILK
19 <sup>th</sup> April 1991	Establishment of V.P.Chindan Silk Weavers Cooperative Society, which presently has a membership of 189 weavers.
9 <sup>th</sup> January 1991	Establishment of Anna Silk Exchange for facilitation of regulating silk yarn exchange in Kanchipuram
1992	Establishment of Office of the Silk conditioning and Testing House in Kanchipuram for testing the quality of Silk yarn procured by Anna Silk Exchange
1992	TANSILK declares its maiden dividend of 11% to all its shareholders including the Tamilnadu state government (whose share of dividend was Rs.5.63 lakhs).
1994	Establishment of J.Jayaialithaa Women Silk Weavers Coop. Society as the second all-women weavers' co-op society, which currently has a membership of 171 women members.
1996	Centralised Purchase Committee starts meeting at the Directorate of Handlooms and Textiles, Kuralagam, Chennai for transparent fixing of Zari prices through sealed tenders obtained from traders across the nation.
1997	RIDE, an NGO working in Kanchipuram reports a shocking number of 40000 bonded child labourers in Kanchipuram Silk industry to the District administration.
15 <sup>th</sup> December 1999	Establishment of Jayendrar Silk Weavers Coop. Society, which currently has a membership of 120 weavers.
1999	Chennai Silks establishes its purchase office in Kanchipuram
2000	Streamlining of zari purchase by Centralised Purchase Committee.
27 <sup>th</sup> July 2000	Establishment of Vai Ko Silk Weavers Coop. Society, which has 244 weavers as its members presently.
2001	Arignar Anna Silk Cooperative society introduces its own registered trademark to uniquely identify its outlet.
8 <sup>th</sup> March 2002	TCIDS - Textile Centre Infrastructure Development Scheme was launched by Government of India
8 <sup>th</sup> February 2003	Inauguration of <b>Loom World</b> - Anna Silk Complex, constructed at a project cost of Rs.200 lakhs at Vallal Pachaiyappan street, Kanchipuram, housing all the retail outlets of Cooperative Silk societies under one roof and serve as a 'one-stop' shop for wedding silk purchases.
2003	Establishment of Non destructive XRF Zari Testing Centre to test the quality of Zari in Kanchipuram Silk saree. An innovative intervention to boost the competitiveness of the cluster.

October 2005	Kanchipuram Handloom Silk Lace Sarees Small Manufacturers Association was started with 125 traders as its members.
October 2, 2005	Launch of Mahatma Gandhi Bunkar Bima Yojana (Life Insurance Scheme for Weavers) through LIC revising the existing Bunkar Bima Yojana Scheme. The scheme shall provide enhanced insurance coverage to handloom weavers in case of natural or accidental death. For the year of 2006-07, a budget provision of Rs.3 crores has been made under the scheme.
October 2005	Scheme of Integrated Textile Parks (SITP) launched by Government of India combining two of its old schemes - Apparel Parks for Export Schemes (APES) and Textile Centre Infrastructure Development Scheme (TCIDS). The scheme envisages setting up of an apparel park at Irungattukottai, Kanchipuram District is a part of this scheme.
November 3, 2005	Launch of Health Insurance Scheme for Handloom Weavers through ICICI Lombard Health Insurance Company. For the year 2006-07, a sum of Rs.17 crores has been released to ICICI Lombard towards the Central Government's share for coverage of new and renewal cases.
9 <sup>th</sup> January 2006	Hand in Hand, an NGO working in Kanchipuram District launches an experimental project of 'factory' system of handlooms with 20 looms installed in Putheri village, near Sirukaveripakkam with about 16 women and 4 men weavers.
2006	Kanchipuram silk obtains registration in 'Geographical Indications' Registry.
28 <sup>th</sup> February 2006	Large scale demonstration by the Kanchipuram Silk Industry against the price hike of zari and yarn
19 <sup>th</sup> March 2006	Government of India allows import of 1000 metric ton silk yarn from China to meet the shortage of supply on the representation by a team from Kanchipuram Silk Industry
June 28, 2006	Launch of Handloom Mark/Logo by Prime Minister of India as a unique identity of Hand woven products
July 31, 2006	A scheme similar to TUFS launched for the handloom sector to provide interest subsidy on term loans.
February 2007	Government of India proposes additional 100-150 handloom clusters to be taken up in 2007-08 for cluster development initiatives; health insurance scheme to be extended to more weavers and also to be enlarged to include ancillary workers; allocation for the sector to be enhanced from Rs.241 crores to Rs.321 crores.
March 2007	Tamilnadu government announces expansion of Mulberry cultivation in additional area 10,000 acres of land to fulfill the silk yarn requirements of the state. The monthly pension for the handloom weavers has been doubled.
April 2007	Co-optex, the apex of cooperatives in Tamilnadu, decides to introduce modern designs in the products of handloom clusters including Kanchipuram.
9 <sup>th</sup> May 2007	Launch of 'Kodai Pookal' collection - a sophisticated range of cotton and silk sarees, including the products of Kanchipuram Cluster, featuring the designs (inspired by traditional motifs and temple architecture) created by National Institute of Design, Ahmedabad.
May 2007	Kanchipuram chosen as one of the destinations for locating the Handloom Export processing Zone by the Government of India

From the above chronicling, it could be easily observed that the weavers of Kanchipuram have enjoyed a prominent position in the society from the very early periods of known history. The occupation has commanded respect in the society to that extent, which has made one of the donors to a temple, be proud in identifying himself as a weaver, in the inscription, which recorded the event.

It can thus be seen that the community of weavers was considered trustworthy enough to deposit money with them and also to entrust them with the responsibility of managing the income and expenditure of the temple. This reveals the high status accorded to the community of weavers during this period.

Having commanded such a royal patronage, there is no doubt that the industry would have flourished under them. Another fact which is also evident from these events is that the industry has been that lucrative, which made the state levy taxes on the weavers and looms.

Even during the British regime, there has been a mention about the Kanchipuram area specializing in silk fabrics. Moreover, the advent of Cooperative movement has happened during British regime in the Madras Presidency, which is in proximity to the Kanchipuram cluster.

Cooperative movement has also gained footing in Kanchipuram in the pre-independence era itself and also has to its credit of being a self-initiated process of organizing into Cooperative.

In the post-independence period too, the cluster has received continuous attention from the government. The number of cooperatives and their membership has seen a growth and various schemes benefiting the cluster have been initiated. Many technical and support institutions like Anna Silk Exchange, TANSILK, Central Silk Board, Weavers Service Centre, Sericulture department, Handlooms department have come into being in the cluster at various points of time to provide assistance and boost the competitiveness of the cluster.

A number of schemes like Intensive Handloom Development Project, Textile Centre Infrastructure Development Scheme, and Scheme for Integrated Textile Parks have been initiated for the benefit of the cluster.

With the initiation of opportunities like Apparel Park initiative under SITP scheme and prioritization of Cluster Development Programme by the Government of India, it is essential that the stakeholders of the cluster gear up to make best possible use of the scenario to boost the competitiveness of the cluster and explore possibilities for internationalization of the cluster.

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## Chapter 4

### GROWTH PROFILE OF WEAVER COOPERATIVES IN KANCHIPURAM SILK CLUSTER

'Cooperatives' have a grand history in Kanchipuram. The Kanchipuram Silk Weavers Cooperative Society is one of the earliest Cooperative Societies in Tamilnadu, started way back in 1942. More numbers of Weaver Cooperatives were started in Kanchipuram Silk Cluster, with a view to bring more number of disadvantaged weavers into the Cooperative fold to ensure their socio-economic security. But due to political interference and lack of strategic planning the efforts are in vain. The Cooperative societies provide raw materials (yarn and zari), design inputs for weaving a silk saree, support services like dyeing/testing, repair of looms, supply of weaving appliances, financial assistance for purchase of weaving appliances, training, etc., to their registered members. Above all, every cooperative society has its own sales outlets, through which marketing arrangements are done for the products woven by the weavers.

The table 4.1 presents the chronological order of silk weaver cooperative societies in Kanchipuram. Out of the 21 Cooperative Societies, two are exclusively marketing cooperative societies, which have been established to provide marketing services for the products of weavers/master weavers who are not covered under the cooperative fold. Short term working capital loans are given to the members on pledge of their stock to the cooperative. The rest of 19 Cooperatives are production cum marketing societies. Each of these Cooperative Societies is headed by a Special Officer and under the administrative control of Deputy Director (Handlooms), Kanchipuram.

#### **Procurement Services:**

Since they are under the administrative control of a single agency the procurement policies for yarn and zari are the same across the cooperatives. The yarn brought to Anna Silk Exchange is procured by TANSILK, from where it gets redistributed to Cooperatives. *Zari*, the golden thread is produced by Tamilnadu Zari Limited (TZL) at Kanchipuram. For requirements beyond the production capacity of TZL, *zari* is outsourced from reliable manufacturers at Surat and Tamilnadu. The price of zari is regulated through a Centralised Purchase Committee. This committee meets at the

Directorate of Handlooms & Textiles periodically and fixes the price of zari based on the sealed bids received from manufacturers.

### **Market-related Services**

The weavers who are members of Cooperatives look up to their societies for marketing support. Apart from provision of marketing of products through their showrooms and agencies the societies provide other market related services like

- arrangement of business to business (B<sub>2</sub>B) contacts with large traders and buyers
- securing and allocation of orders from agencies like Cooptex
- provision of market intelligence information like changing preferences of customers, latest trends in markets, etc.
- One of the major facilities that are provided by Cooperatives is common showroom for showcasing the products of the weavers. These exclusive outlets of Cooperatives enjoy the credibility among customers who look upon them as synonyms of purity and quality. But because of this many bogus cooperatives are coming up with deceptive names and brands, to cheat the customers and capitalize on their brand equity.

### **Financial Services**

The members of the weaver Cooperatives are provided with different financial services like savings and loan programmes, providing credit facilities, intermediation of credit and insurance service to members. The members are issued a credit of Rs. 10000/- every year and the repayment is adjusted against the wages and bonus amount. The members get automatically enrolled in welfare schemes / insurance schemes introduced by the government. They are the beneficiaries of schemes like Savings and Security Scheme, Bunkar Bima Yojana, Old Age Pension Scheme, Family Pension Scheme, ICICI Lombard Health insurance scheme etc. For all these schemes the subscription is paid by the Cooperatives or the government and the weaver-members benefit out of the schemes.

In this chapter the production, sales, membership, share capital, wages/bonus paid to members, cash credit status, and profitability of the Cooperatives have been analysed in detail.

□□□□□ 4.1

**Kanchipuram** □□□□ □□□□□□ **Cooperatives - Membership** □□□□□□□

S.No	Name of the Coop. Society	Date of Registration	Total members	Active	Idle
1	Kanchipuram Silk WCS	19/4/1942	1747	709 (40.58)	1038 (59.42)
2	Kamakshiamman SWCS	3/3/1955	1377	1120 (81.34)	257 (18.66)
3	Kanchipuram Silk handloom Weavers Marketing Society	12/11/1955	810	780 (96.30)	30 (3.70)
4	Murugan SWCS	2/2/1957	2599	2131 (81.99)	468 (18.01)
5	Thiruvalluar WCS	24/12/1962	2053	1241 (60.45)	812 (39.55)
6	Sri Varadharajaswamy SWCS	30/1/1964	1116	245 (21.95)	871 (78.05)
7	Pallavar SWCS	24/2/1968	898	790 (87.97)	108 (12.03)
8	Arignar Anna SWCS	22/5/1971	1884	1507 (79.99)	377 (20.01)
9	MamallanSWCS	30/11/1972	718	150 (20.89)	568 (79.11)
10	Kalaignar Karunanithi WCS	1973	1645	913 (55.50)	732 (44.5)
11	Kanchipuram Vallalar SWCS	27/5/1975	1576	550 (34.90)	1026 (65.1)
12	C.V.M.Annamalai SWCS	16/4/1975	1133	173 (15.27)	960 (84.73)
13	E.V.R.Periyar SWCS	3/6/1975	409	110 (26.89)	299 (73.11)
14	Kanchipuram Sri Krishna Silk Handloom Weavers Marketing Society	7/7/1980	715	690 (96.50)	25 (3.50)
15	Annai Kasthuribai Women SWCS	10/1/1985	118	35 (29.66)	83 (70.34)
16	Dheerar Sathyamoorthy SWCS	2/4/1987	371	50 (13.48)	321 (86.52)
17	V.P.Chindan WCSP&M	19/4/1991	189	50 (26.46)	139 (73.54)
18	J.Jayalalithaa Women SWCS	27/7/1994	171	50 (29.24)	121 (70.76)
19	Jeyandrar SWCS	15/12/1999	120	45 (37.5)	75 (62.50)
20	Vai ko SWCS	27/7/2000	244	45 (18.44)	199 (81.56)
21	Bharathiyar SWCS	N.A.	N.A.	N.A.	N.A.
	<b>Total</b>		<b>19893 (100)</b>	<b>11384 (57.23)</b>	<b>8509 (42.77)</b>

Source: Weaver Cooperatives

Note: Figures in the parenthesis denote column percentages

N.A.: Not Available

The table 4.1 portrays the membership details and the classification of active and idle members. It is found that among the total members more than half (57.23 per cent) are active and the rest idle (42.77 per cent). In case of idle membership the highest idle members were found in Dheerar Satyamoorthy Cooperative Society (86.52 per cent), followed by CVM Annamalai Society (84.73 per cent) and Vai Ko Society (81.56 per cent). Both the marketing cooperatives have the highest number of active members and lowest number of idle members, because their members come to the society only for marketing the products, which have already been produced by them. In the case of production cooperatives, Pallavar Society (87.97 per cent) has the highest percentage of active members and the lowest (13.48 per cent) is found in the case of Dheerar Satyamoorthy Cooperative Society.



**Table 4.2**  
**Growth in Membership**

S. No.	Name of Society	2002	2003	Growth rate*	2004	Growth rate*	2005	Growth rate*	2006	Growth rate*
1	Kanchipuram Silk WCS	3976	3921	-1.38	3960	0.99	2394	-39.55	1747	-27.03
2	Kamakshiamman SWCS	1476	1438	-2.57	1419	-1.32	1403	-1.13	1377	-1.85
3	Kanchipuram Silk handloom Weavers Marketing Society	861	854	-0.81	839	-1.76	822	-2.03	810	-1.46
4	Murugan SWCS	2640	2629	-0.42	2616	-0.49	2605	-0.42	2599	-0.23
5	Thiruvalluar WCS	2527	2098	-16.98	2075	-1.10	2065	-0.48	2053	-0.58
6	Sri Varadharajaswamy SWCS	1980	1339	-32.37	1189	-11.20	1157	-2.69	1116	-3.54
7	Pallavar SWCS	1757	966	-45.02	947	-1.97	932	-1.58	898	-3.65
8	Arignar Anna SWCS	1921	1895	-1.35	1888	-0.37	1887	-0.051	1884	-0.16
9	MamallanSWCS	1110	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	718	N.A.
10	Kalaignar Karunanidhi WCS	1686	1670	-0.95	1656	-0.84	1649	-0.42	1645	-0.24
11	Kanchipuram Vallalar SWCS	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	1576	N.A.
12	C.V.M.Annamalai SWCS	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	1133	N.A.
13	Periyar SWCS	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	409	N.A.
14	Kanchipuram Sri Krishna Silk Handloom Weavers Marketing Society	759	749	-1.32	735	-1.87	723	-1.63	715	-1.11
15	Annai Kasthuribai Women SWCS	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	118	N.A.
16	Dheerar Sathyamoorthy SWCS	1026	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	371	N.A.
17	V.P.Chindan WCSP&M	224	217	-3.13	213	-1.84	203	-4.69	189	-6.90
18	J.Jayalalithaa Women SWCS	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	171	N.A.
19	Jeyandrar SWCS	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	120	N.A.
	Vai ko SWCS	N.A.	N.A.	N.A.	N.A.	N.A.	■ N.A.	N.A.	244	N.A.

Source: Annual Reports of Cooperatives N.A. - Not Applicable/Available \* in percentage

Out of the 21 Silk Weaver Cooperative Societies only 13 Cooperatives have been publishing annual reports furnishing their progress. The above table furnishes the growth in membership for the Cooperative Societies. There are many Cooperatives functioning in Kanchipuram Silk Cluster with a view to bring more number of weavers within the Cooperative fold. But due to the problems of marketing faced by Cooperatives and other administrative reasons, the enrolment of members has been halted. Due to the slump in market and influx of cheaper varieties and powerloom goods in the market, the Cooperatives suffered from accumulated stocks. They were unable to give continuous employment to the weavers. Hence some members started withdrawing from the Cooperatives. Due to the age factor, some members discontinued weaving. Owing to the combined effect of closure to membership and withdrawal/retirement of members, the Cooperatives have been witnessing a continuous slump in membership growth.

Table 4.3

சென்னை மாவட்டம் சிலைத் துறைகளின் செயல்பாடுகள்

(Rs. in lakhs)

S.No	Name of Society	2002	2003	Growth rate	2004	Growth rate	2005	Growth rate	2006	Growth rate
1	Kanchipuram Silk WCS	700.18	432.26	-38.26	661.87	53.12	656.85	-0.76	635.28	-3.28
2	Kamakshiamman SWCS	1206.58	701.73	-41.84	898.39	28.03	897.15	-0.14	787.88	-12.18
3	Murugan SWCS	868.32	630.96	-27.34	758.82	20.26	788.42	3.90	793.87	0.69
4	Thiruvalluar WCS	98472	715.83	-27.31	610.05	-14.78	743.87	21.94	783.09	5.27
5	Varadharajaswamy SWCS	362.05	290.4	-19.79	368.86	27.02	321.22	-12.92	234.64	-26.95
6	Pallavar	519.06	374	-27.95	316.23	-15.45	429.54	35.83	327.86	-23.67
7	Arignar Anna	1360.31	1219.9	-10.32	1679.94	37.71	1729.9	2.97	1695.8	-1.97
8	MamallanSWCS	2.7	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
9	Kalaingar Karunanidht WCS	675.26	480.14	-28.90	587.96	22.46	515.69	-12.29	498.83	-3.27
10	Vallalar SWCS	81.02	105.76	30.54	94.08	-11.04	61.13	-35.02	29.91	-51.07
11	C,V,M,Annamalai SWCS	102.41	60.37	-41.05	45.37	-24.85	50.3	10.87	15.5	-69.18
12	V.P.Chindan WCSP&M	96.72	65.95	-31.81	78.05	18.35	69.11	-11.45	56.19	-18.69
	<b>Total</b>	<b>6959.33</b>	<b>5077.3</b>	<b>-27.04</b>	<b>6099.62</b>	<b>20.14</b>	<b>6263.18</b>	<b>2.68</b>	<b>5858.85</b>	<b>-6.46</b>

Source: Annual Reports of Cooperatives

N.A. - Not Applicable/Available \* in percentage

The above table shows the production trend of Cooperatives in the past five year period.

In the case of total production, there has been a decline only during 2003 and 2006, A hike in production value is observed in 2004. But there is only a marginal hike in production rate in 2005. This may be due to the rise in prices of raw material inputs like yarn and zari. The other main reason affecting production growth is the slump in sales and availability of cheaper varieties of silk in the market. In order to avoid the accumulation of stocks, the Cooperatives would have decided not to produce further.

The technical problem in production of silk sarees is their shelf life. A saree stocked for more than one year, within two years, above two years and above three years are being sold at a rebate of 10 percent, 35 percent, 45 percent and 55 percent respectively. The discounts shall partly be subsidized by the government on occasions, but many a times the respective Cooperatives will have to bear the losses. To avoid such inconveniences, the Cooperatives resorted to restriction of production.

In the case of individual Cooperatives, only Vallalar Society has recorded a positive growth in the year 2004, thereafter there is a steady decline. Murugan Silk Cooperative is the only society that has recorded a positive growth in production after 2005.

**Table 4.4**  
**Sales in Cooperatives**

*(Rs. in lakhs)*

S.No	Name of Society	2002	2003	Growth rate	2004	Growth rate	2005	Growth rate	2006	Growth rate
1	Kanchipuram Silk WCS	910.34	821.33	-9.78	924.89	12.61	725.37	-21.57	775.95	6.97
2	Kamakshiamman SWCS	1378.49	1318.4	-4.36	1192.34	-9.56	1139.93	-4.40	1046.12	-8.23
3	Kanchi Marketing Society	225.18	224.81	-0.16	201	-10.59	149.99	-25.38	132.86	-11.42
4	Muruqan SWCS	1041.14	1047.87	0.65	931.11	-11.14	992.25	6.57	906.87	-8.60
5	Thiruvailuar WCS	736	1241.95	68.74	1111.47	-10.51	1048.1	-5.70	1007.21	-3.90
6	Sri Varadharajaswamy SWCS	3620.33	290.4	-91.98	368.86	27.02	321.22	-12.92	234.65	-26.95
7	Pallavar	530.13	701.1	32.25	510.91	-27.13	479	-6.25	422.29	-11.84
8	Arignar Anna	1942.03	2379.94	22.55	1877.17	-21.13	1987.48	5.88	1912.68	-3.76
9	MamallanSWCS	247	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
10	Kalaingar Karunanidhi WCS	794.04	973.43	22.59	737.36	-24.25	654.75	-11.20	647.52	-1.10
11	Kanchipuram Vallalar SWCS	260	340.58	30.99	305.53	-10.29	147.7	-51.66	147.9	0.14
12	C.V.M.Annamalai SWCS	180.42	141.74	-21.44	147.53	4.08	83.87	43.15	17.5	-79.13
13	Sri Krishna Marketing Society	110.98	105.81	-4.66	89.59	-15.33	65.39	-27.01	54.73	-16.30
16	V.P.Chindan WCSP&M	126.9	105.8	-16.63	98.55	-6.85	82.47	-16.32	70.59	-14.41
	<b>Total</b>	<b>12102.98</b>	<b>9693.16</b>	<b>-19.91</b>	<b>8496.31</b>	<b>-12.35</b>	<b>7877.52</b>	<b>-7.28</b>	<b>7376.87</b>	<b>-6.36</b>

Source: Annual Reports of Cooperatives N.A., - Not Applicable/Available \* in percentage

The sales revenue of Cooperatives is the aggregate of sales at the head office, showroom at Kanchipuram, Loom World show rooms, branch office, exhibition and sales through authorized agencies. The annual growth rate in sales is found to have been declining throughout the period of study (vide table 4.4), the main reasons being (i) the availability of cheaper varieties of silk fabrics produced in other clusters like Arni, Kumbakonam, etc., (ii) imitation silk sarees from powerlooms at a lesser price, (iii) increasing use of fake zari in the silk sarees and selling them at lesser prices, (iv) problem of brokers and (v) unfair trade practice of selling goods of other origins as Kanchipuram sarees. Other problems were lesser sales promotion and advertising budgets for the Cooperatives, which puts them at a disadvantage against their private competitors.

The intervention of major textile retail players like Pothys, Chennai Silks, Kumaran, etc., into the silk saree market could also be a major reason for the declining sales. The product innovation, diversification, branding, aggressive advertising and sales promotion of these private players have bewitched the customers, who were previously making direct purchases from the Kanchipuram cluster (See Annexure - II, case 10). With a thin advertising budget and product diversification the cooperatives had to lose the market. Benefited by this sudden customer attention to silk sarees and promotional efforts like exhibitions, branding and diversification, a sign of recovery is also seen with the declining percentage of negative growth.

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(Rs. in lakhs)

S.No	Name of Society	2002	2003	Growth rate	2004	Growth rate	2005	Growth rate	2006	Growth rate
1	Kanchipuram Silk WCS	69.39	31.03	-55.28	48.13	55.11	122.7	154.93	46.64	-61.99
2	Kamakshiamman SWCS	164.61	711.48	332.22	116.12	-83.68	240.05	106.73	86.98	-63.77
3	Murugan SWCS	126.21	71.36	43.46	114.78	60.85	193.29	68.40	104.7	-45.83
4	Thiruvalluar WCS	10.87	37.66	246.46	115.65	207.09	224.14	93.81	92.13	-58.90
5	Varadharajaswamy SWCS	27.62	31.64	14.55	35.3	11.57	89.04	152.24	5.61	-93.70
6	Pallavar	16.64	23.32	40.14	34.75	49.01	74.32	113.87	0	-100.00
7	Arignar Anna	190.37	309.15	62.39	345.18	11.65	423.57	22.71	303.03	-28.46
8	MamallanSWCS	8.69		N.A.		N.A.		N.A.		N.A.
9	Kalaiggar Karunanidhi WCS	72.16	49.48	-31.43	56.75	14.69	137.77	142.77	51.29	-62.77
10	V.P.Chindan WCSP&M	11.49	6.35	-44.73	10.2	60.63	11.14	9.22	6.43	42.28
	<b>Total</b>	<b>698.05</b>	<b>1271.47</b>	<b>82.15</b>	<b>876.86</b>	<b>-31.04</b>	<b>1516.02</b>	<b>72.89</b>	<b>696.81</b>	<b>-54.04</b>

Source: Annual Reports of Cooperatives N.A. - Not Applicable/Available

\* in percentage

The excess of sales revenue over the cost of production is called the '*Profit from business operations*'. This reflects the efficient utilisation of production capacity. This is affected by the factors like capacity utilisation, sales revenue, cost of production, efficient cost and overhead control.

From the table 4.5, it could be observed that only ten out of 21 Cooperatives have been able to register a profit from business operations and there has also been a fluctuating trend. This can be mainly attributed to the continuous hike in the cost of raw materials (especially zari), fluctuating trend in sales and restriction of production. High competition from the private players, welfare oriented approach and absence of professional cost management practices by the Cooperatives, were the other reasons for the trend.

As a measure of welfare policy, the societies have to ensure the weaver-members with at least a minimum of Rs.1000/- as earnings per month. For this reason, the weavers have to be engaged with at least a bare minimum level of work. But, in the case of private weavers, they are free to stop further orders based on market conditions. The wages paid by Cooperatives are almost 40% higher than that paid by the private players. Though an equivalent wage rate has been fixed for private weavers, it is hardly found in practice. Moreover, some political/policy decisions are thrust upon the Cooperatives, without considering the ground realities, eating upon their profits. All these factors take a toll on the profit of these Cooperatives, leaving them in red.

□□□□□ 4.6  
Paid up Share Capital

(Rs.in lakhs)

S.No	Name of Society	2002	2003	Growth rate	2004	Growth rate	2005	Growth rate	2006	Growth rate
1	Kanchipuram Silk WCS	106.49	102.57	-3.68	96.17	-6.24	95.11	-1.10	85.98	-9.60
2	Kamakshiamman SWCS	64.31	63.51	-1.24	62.83	-1.07	61.93	-1.43	61.25	-1.10
3	Kanchipuram Silk handloom Weavers Marketing Society	40.25	41.71	3.63	43.1	3.33	41.92	-2.74	42.89	2.31
4	Murugan SWCS	115.7	131.1	13.31	139.57	6.46	147.56	5.72	150.15	1.76
5	Thiruvalluar WCS	N.A.	N.A.	N.A.	N.A.	N.A.	86.07	N.A.	81.85	4.90
6	Sri Varadharajaswamy SWCS	90.24	87.72	-2.79	80.82	-7.87	83.47	3.28	81.41	-2.47
7	Pallavar	57.79	53.13	-8.06	61.14	15.08	61.99	1.39	59.07	4.71
8	Arignar Anna	111.74	113.3	1.40	111.77	-1.35	193.46	73.09	192.4	-0.55
9	MamallanSWCS	19.05		N.A.		N.A.		N.A.		N.A.
10	Kalaigiar Karunanidhi WCS	57.55	59.41	3.23	62.03	4.41	64.24	3.56	66.35	3.28
11	Kanchipuram Vallalar SWCS	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	27.91	N.A.
12	Kanchipuram Sri Krishna Silk Handloom Weavers Marketing Society	35.84	37.03	3.32	35.99	-2.81	32.37	-10.06	31.83	-1.67
13	V.P.Chindan WCSP&M	11.67	13.12	12.43	13.12	0.00	12.78	-2.59	12.35	-3.36
	<b>Total</b>	<b>710.63</b>	<b>702.6</b>	<b>-1.13</b>	<b>706.54</b>	<b>0.56</b>	<b>880.9</b>	<b>24.68</b>	<b>893.44</b>	<b>1.42</b>

Source: Annual Reports of Cooperatives N.A. - Not Applicable/Available

\* inpercentage

Every weaver who wishes to become a member in a Cooperative Society has to subscribe for the minimum share capital as specified in the memorandum. Only on payment of the share capital the member became eligible for the benefits provided by the Cooperatives. 'A' class members were also given voting rights in the annual general meeting of the Cooperatives. In the case of Companies, the share capital cannot be withdrawn by the shareholder until the winding up or liquidation of the Company. But in the case of Co-operatives, while a member leaves, their share capital was returned. Hence a depleting membership also resulted in depletion of paid up share capital.

As discussed in tables 4.2 to 4.4, due to the bad conditions prevailing in the market and lackluster performance of cooperatives, they were unable to fetch the members with regular orders. Hence the declining membership has become a regular phenomenon with all the Cooperatives. Fresh enrolment of members has also been halted, which resulted in the decline of share capital. Thus with a fall in membership, the decline in share capital became inevitable.

#### □□□□□ 4.7

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(Rs.in lakhs)

S. No.	Name of the Society	2002	2003	Growth rate	2004	Growth rate	2005	Growth rate	2006	Growth rate
1	Kanchipuram Silk WCS	17.65	8.88	-49.69	4.53	48.99	13.15	190.29	-55.03	-518.48
2	Kamakshiamman SWCS	21.45	-13.92	-164.90	42.29	203.81	0.22	-100.52	-84.52	-38518.18
3	Kanchipuram Silk handloom Weavers Marketing Society	-5.44	-14.19	160.85	-10.53	-25.79	-13.89	31.91	-24.92	79.41
4	Murugan SWCS	92.13	50.26	-45.45	54.9	9.23	82.62	50.49	83.67	1.27
5	Thiruvalluar WCS	-35.39	-17.71	49.96	41.47	-334.16	84.73	104.32	48.16	43.16
6	Sri Varadharajaswamy SWCS	0	0	N.A.	0	N.A.	12.3	N.A.	0	0.00
7	Pallavar	-44.63	1.4	-103.14	-36.24	-2688.57	1.16	-103.20	-60.71	-5333.62
8	Arignar Anna	84.05	211.64	151.80	234.13	10.63	256.55	9.58	169.73	-33.84
9	MamallanSWCS	-71.62	0	-100.00	0	N.A.	0	N.A.	0	0.00
10	Kalaighnar Karunanidhi WCS	1.31	1.76	34.35	0	-100.00	0.54	N.A.	0	0.00
11	Kanchipuram Sri Krishna Silk Handloom Weavers Marketing Society	-17.62	-27.65	56.92	-30.69	10.99	-33.46	9.03	-41.99	25.49
12	V.P.Chindan WCSP&M	-2.2	-9.78	344.55	-3.32	-66.05	-3.33	0.30	-6.96	109.01
	<b>Total</b>	<b>39.69</b>	<b>190.69</b>	<b>380.45</b>	<b>211.96</b>	<b>11.15</b>	<b>400.59</b>	<b>88.99</b>	<b>27.43</b>	<b>-93.15</b>

Source: Annual Reports of Cooperatives N.A. - Not Applicable/Available

\* in percentage

There has been a declining growth in net profit of the Cooperative societies (vide table 4.7). This is due to the combined effect of decrease in sales, increasing cost of raw materials and the interest burden on the borrowings by Cooperatives. It can also be found from the table that only Murugan Society was able to show some sign of recovery. All the other societies have been struggling with continuous losses or fluctuating trends of profit.

It could be observed from the above table that only three (14.29 percent) Cooperative Societies viz., Murugan, Thiruvalluar and Arignar Anna, have recorded a net profit in the recent period.

□□□□□ 4.8  
**Wages Paid to Members**

(Rs.inlakhs)

S.No	Name of Society	2002	2003	Growth rate	2004	Growth rate	2005	Growth rate	2006	Growth rate
1	Kanchipuram Silk WCS	189.8	132.74	-30.06	179.21	35.01	185.49	3.50	177.8	4.15
2	Kamakshiamman SWCS	328.34	203.61	-37.99	239.86	17.80	238.25	-0.67	214.64	-9.91
3	Murugan SWCS	262.12	177.34	-32.34	218.56	23.24	224.47	2.70	222.52	-0.87
4	Thiruvalluar WCS	194.74	167.21	-14.14	201.91	20.75	209.21	3.62	238.87	14.18
5	Sri Varadharajaswamy SWCS	96.63	83.45	-13.64	94.65	13.42	84.17	-11.07	63.58	-24.46
6	Pallavar	101.6	88.65	-12.75	115.37	30.14	93.86	-18.64	66.16	-29.51
7	Arignar Anna	393.47	370.94	-5.73	478.65	29.04	504.23	5.34	493.23	-2.18
8	MamallanSWCS	47.3		N.A.		N.A.		N.A.		N.A.
9	Kalaiqnar Karunanidhi WCS	169.46	143.91	-15.08	169.37	17.69	145.79	-13.92	132.82	-8.90
10	Kanchipuram Vallalar SWCS			0.00		0.00		0.00	14.58	0.00
11	C.V,M.Annamalai SWCS	15.56	12.83	-17.54	12.82	-0.08	6.72	-47.58	5.26	-21.73
12	V.P.Chindan WCSP&M	29.13	20.94	-28.12	23.07	10.17	20.2	-12.44	15.89	-21.34
	<b>Total</b>	<b>1828.15</b>	<b>1401.62</b>	<b>-23.33</b>	<b>1733.47</b>	<b>23.68</b>	<b>1712.39</b>	<b>■1.22</b>	<b>1645.35</b>	<b>-3.91</b>

Source: Annual Reports of Cooperatives      N.A. - Not Applicable/Available

\* in percentage

Weaving profession was considered highly lucrative since years of yore and the weavers were held high in the social ladder. This industry also attracted a lot of cotton weavers into silk weaving in the cluster. This is an art, which calls for a high level of dexterity and dedication. But the efforts are not commensurately rewarded.

In the case of Cooperatives, the wages are almost 40 per cent higher than that of the private sector. Due to the welfare component in the policy of government, the weavers of Cooperatives earn a higher wage. But regular wage revisions are not done periodically in lien with the changing circumstances. Even then the weavers from Cooperative Societies earn a higher wage than the existing market conditions. Wage component is directly proportional to the growth in production. The fluctuating trend in production has resulted in a similar trend in wage payment too (vide table 4.8). Due to the slump in sales, the cooperatives have restricted their production resulting in decrease in payment of wages.

The calculation of wages at the Cooperatives, by itself is an interesting technical exercise. It involves such intricate calculations and appraisal of the finished product. About nine components go into the calculation of wages for a single silk saree. Another interesting fact to note in the case of wages, is that the weaver members, though received better wages, were not able to receive the full benefits due to the adjustment of wages against their dues on the borrowings/cash advance obtained from the cooperative society.

**Table 4.9**

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(Rs .in lakhs)

S.No	Name of Society	2002	2003	Growth rate	2004	Growth rate	2005	Growth rate	2006	Growth rate
1	Kanchipuram Silk WCS	8.83	4.44	-49.72	0	0.00	0	0.00	0	0.00
2	Kamakshiamman SWCS	12.08	0	-100.00	0	0.00	0	0.00	0	0.00
3	Murugan SWCS	45.97	25.01	-45.59	27.32	9.24	41.38	51.46	41.83	1.09
4	Thiruvalluar WCS	0	0	0.00	20.74	0.00	42.34	104.15	22.08	-47.85
5	Arignar Anna	34.82	105.72	203.62	117.07	10.74	128.23	9.53	84.84	-33.84
	<b>Total</b>	<b>101.7</b>	<b>135.17</b>	<b>32.91</b>	<b>165.13</b>	<b>22.16</b>	<b>211.95</b>	<b>28.35</b>	<b>148.75</b>	<b>-29.82</b>

Source: Annual Reports of Cooperatives

N.A. - Not Applicable/Available\*inpercentage

Bonus is a special feature of Cooperatives. It is an excess amount paid to the weaver members, by the Cooperatives, on realization of higher profits from the sale of products. Higher the level of bonus implies higher sales revenue.

It is learnt vide table 4.9 that even in the case of profit-making Cooperatives, bonus has not been a regular feature, in the recent five year period, the main reason being the decreasing sales revenue percolating into all other beneficial aspects like bonus, etc.

During the survey, Mr.Murugan, a Cooperative Society member reflecting this view said, "Earlier we were privileged as members of Cooperative Society. While our private counterparts got lesser wages, we received a higher wage as well as additional bonus as a result of higher sales. But now, the cooperative society itself is in red, making our bonus, a history of past. Leave alone bonus, even our wages and regular employment are slowly becoming a question", he lamented.

Earlier for a faster weave, the weaver used to be rewarded with an incremental bonus. But now the practice has been discontinued and at times there is also a delay, even in supply of the required warp and weft yarn for the weave.



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(Rs.in lakhs)

S.No	Name of Society	2002	2003	Growth rate	2004	Growth rate	2005	Growth rate	2006	Growth rate
1	Kanchipuram Silk WCS	508.46	441.06	-13.26	433.16	-1.79	413.32	4.58	417.22	0.94
2	Kamakshiamman SWCS	814.81	652.75	-19.89	741.77	13.64	732.26	-1.28	701.76	4.17
3	Kanchipuram Silk handloom Weavers Marketing Society	34.75	36.35	4.60	33.73	-7.21	27.06	-19.77	23.92	-11.60
4	Murugan SWCS	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	93.76	N.A.
5	Thiruvalluar WCS	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	515.64	N.A.
6	Sri Varadharajaswamy SWCS	389.83	354.22	-9.13	345.72	-2.40	345.05	-0.19	341.48	-1.03
7	Pallavar	348.27	329.22	-5.47	324.93	-1.30	326.47	0.47	316.43	-3.08
8	Arignar Anna	855.12	691.36	-19.15	464.09	-32.87	343.8	-25.92	705.8	105.29
9	MamallanSWCS	113.12	148.8	N.A.	200.73	N.A.	199.68	N.A.	193.08	N.A.
10	Kalaingar Karunanidhi WCS	492.87	471.16	4.40	475.63	0.95	451.11	-5.16	441.83	-2.06
11	Kanchipuram Vallalar SWCS	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	256.3	0.00
12	C.V.M.Annamalai SWCS	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	124	0.00
13	Kanchipuram Sri Krishna Silk Handloom Weavers Marketing Society	57.02	46.58	-18.31	41	-11.98	39.04	-4.78	38.43	-1.56
14	V.P.Chindan WCSP&M	77.94	67.17	-13.82	73.64	9.63	60.86	-17.35	60.5	-0.59
	<b>Total</b>	<b>3692.19</b>	<b>3238.67</b>	<b>-12.28</b>	<b>3134.4</b>	<b>-3.22</b>	<b>2938.65</b>	<b>-6.25</b>	<b>4230.15</b>	<b>43.95</b>

Source: Annual Reports of Cooperatives N.A. - Not Applicable/ Available

\* inpercentage

Cash credit is a unique facility available only for the Cooperative Societies from the Kanchipuram Central Cooperative Bank. This is offered to the cooperatives in order to meet their working capital requirements. The volume of cash credit is based on the sum value of finished goods inventory, bills receivable, rebate amount, sundry creditors, etc. The interest rate charged is 10.5 per cent for this cash credit. Earlier NABARD has been offering about 3 per cent of the interest amount as subsidy, but this has been stopped since the past two years.

There has been an increase in the total cash credit availed by Cooperatives from the year 2004 (vide table 4.10). In 2006, a positive growth rate could also be seen, inspite of the withdrawal of interest subsidy by NABARD, which shows the vitality of this facility for the functioning of Cooperatives. It could also be observed that in the case of Sri Varadharajaswamy society there has been a continuous decline in the availing of cash credit due to the accumulated losses and associated restriction of production.

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(Rs. in lakhs)

S.No	Name of Society	2002	2003	Growth rate	2004	Growth rate	2005	Growth rate	2006	Growth rate
1	Kanchipuram Silk WCS	46.97	56.83	20.99	62.49	9.96	68.28	9.27	62.88	-7.91
2	Kamakshiamman SWCS	106.92	94.8	-11.34	102.65	8.28	103.23	0.57	108.69	5.29
3	Kanchipuram Silk handloom Weavers Marketing Society	126.96	136.63	7.62	124.43	-8.93	90.19	-27.52	73.73	-18.25
4	Kalaigiar Karunanidhi WCS	12.7	14.1	11.02	16.87	19.65	15.41	-8.65	13.79	-10.51
5	Kanchipuram Sri Krishna Silk Handloom Weavers Marketing Society	79.33	61.65	-22.29	59.98	-2.71	41.45	-30.89	31.75	-23.40
	<b>Total</b>	<b>372.88</b>	<b>364.01</b>	<b>-2.38</b>	<b>366.42</b>	<b>0.66</b>	<b>318.56</b>	<b>-13.06</b>	<b>290.84</b>	<b>-8.70</b>

Source: Annual Reports of Cooperatives

\* inpercentage

One of the major features, which differentiate Cooperatives from private players, is their welfare orientation. Apart from providing a higher wage to the weavers, various other initiatives are also taken by the Cooperatives, with a view to support the weaver members. A weaver is eligible for receiving wages only on supply of finished goods. But it takes at least 15-20 days for the weaver to complete weaving a saree. Till then he has to suffer in making both the ends meet. With this in view, the Cooperatives have been issuing cash advance to its members and on submission of the finished products the advance is deducted in installments from the wages of the members.

The table 4.11 summarizes the amount of advance that the cooperatives have issued to the weavers during the recent five year period. Due to the slump in sales and reduced production, the Cooperatives were unable to fetch the members with continuous orders. Since orders have decreased there has also been a reduction in issue of cash advance to members. From the above table it could be observed that there has been a fluctuating trend in issue of cash advance to members by Cooperatives. Only about five of the Cooperative Societies have been able to provide cash advance to its members. Two of them are marketing societies which advance 75% of the value of products on pledge by the members for marketing them. Except Karunanidhi Society, the other two Kamakshiamman and Kan chi Society are bigger societies which are capable of supporting their members continuously with such welfare measures.

Table 4.12

**Share of individual Cooperatives in their total market**

S. No.	Name of the Society	2002 % Share	2003 % Share	2004 % Share	2005 % Share	2006 % Share	Average % Share
1	Kanchipuram Silk WCS	7.52	8.47	10.89	9.21	10.52	9.32
2	Kamakshiamman SWCS	11.39	13.60	14.03	14.47	14.18	13.54
3	Kanchi Marketing Society	1.86	2.32	2.37	1.90	1.80	2.05
4	Murugan SWCS	8.60	10.81	10.96	12.60	12.29	11.05
5	Thiruvalluvar SWCS	6.08	12.81	13.08	13.30	13.65	11.79
6	Sri Varadharajaswamy SWCS	29.91	3.00	4.34	4.08	3.18	8.90
7	Pallavar SWCS	4.38	7.23	6.01	6.08	5.72	5.89
8	Arignar Anna SWCS	16.05	24.55	22.09	25.23	25.93	22.77
9	Mamallan SWCS	2.04	N.A.	N.A.	N.A.	N.A.	0.41
10	Kalaighar Karunanidhi SWCS	6.56	10.04	8.68	8.31	8.78	8.47
11	Kanchipuram Vallalar SWCS	2.15	3.51	3.60	1.87	2.00	2.63
12	CVM Annamalai SWCS	1.49	1.46	1.74	1.06	0.24	1.20
13	Sri Krishna Marketing Society	0.92	1.09	1.05	0.83	0.74	0.93
14	V.P.Chindan WCSP&M	1.05	1.09	1.16	1.05	0.96	1.06
	<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Source: Annual Reports of Cooperatives

A close observation of the table 4.12 reveals that Arignar Anna Cooperative Society had the highest (22.77 per cent) share among the Cooperatives followed by Kamakshiamman society (13.54 per cent) and Thiruvalluvar Society (11.79 per cent). The focused marketing initiatives of Arignar Anna society shall be attributed to the higher share in the market enjoyed by the society.

Explaining the reasons for the success of Arignar Anna Society, the special officer, Dr.Nagarajan, a management graduate, said, "We have developed a distinct logo for our society and popularized it through advertisements in print media and hoardings. Our hoardings have been placed at the entry points of the town and other vantage points to grab the attention of customers. We get only a small budget for sales promotion. Wiser use of the same becomes essential."

Anna Society and Thiruvalluvar Society, realizing the need to keep pace with the market trends have installed computerized designing and mechanized the production of design punch cards. Such pioneering efforts, scale economies, larger weaver base and financial strength due to profitability provides them the strategic strength against their smaller counterparts.

#### **Market Segmentation for the [REDACTED] Segment of Kanchipuram Silk [REDACTED]**

A market segment consists of a large identifiable group within a market with similar wants, purchasing power, geographical location, buying attitudes, or buying habits. Segment marketing offers several benefits over mass marketing. The company can create a more fine-tuned product or service offering and price it appropriately for the target customers. The choice of distribution channels and communication channels becomes much easier. The company also may face fewer competitors in the particular segment. The major segmentation variables are geographic, demographic, psychographic and behavioural.

But in the case of the traditional MSME clusters like Kanchipuram, there is an acute dearth of market research efforts which are essential for defining, and to gain better understanding of the target market and channelise the marketing efforts accordingly. This results in unplanned marketing efforts which do not yield desired results.

A small attempt has been made here to segment the market based on distribution channels/their location and geographical location of the market. First, the sales data were collected from select bigger Cooperatives which ranked in the top-three positions of market share among Cooperatives (vide table 4.12). Marketing channel-wise segmentation of the data was carried out. The data for the recent three year period were listed, the percentage to total sales for each year and the average for all the years for a particular channel were calculated. Percentage of sales was chosen to facilitate juxtaposition and comparison of the different channels. These data were further grouped into five major heads viz., Cooptex showrooms, exhibitions, independent showrooms of the Cooperatives, agency showrooms (within Tamilnadu) and agency showrooms (in other states). Thereafter, the data were classified based on the geographical location of markets to understand the geographical segmentation. Finally a separate analysis, on the percentage of sales through 'Loom World' showrooms - the exclusive chain of outlets for Cooperatives, was carried out in order to understand the effectiveness of this initiative.

Table 4.13  
Channel-wise segmentation of the market for Cooperatives  
(in percentages)

S.No.	Channel/Location	% of Sales	Cumulative % of Sales
1	Co-optex	9.72	9.72
2	Exhibition Sales	0.23	0.23
	<b>Independent Showrooms</b>		
3	Local Showrooms (Kanchi)	34.02	
4	Outstation Showrooms	7.49	41.51
	<b>Common Showrooms</b>		
5	Chennai & Pondicherry	1.10	1.10
	<b>Agency Showrooms</b>		
6	West Tamilnadu	4.62	
7	South Tamilnadu	24.35	
8	Central Tamilnadu	12.38	
9	North Tamilnadu	0.75	
10	Pondicherry	0.03	42.13
	<i>Other States</i>		
11	Andhra Pradesh	5.22	
12	Karnataka	0.09	5.31
	<b>Total</b>	<b>100</b>	<b>100</b>

Source: Records of Cooperatives (2003-04 to 2006-07)

Marketing channels for any product can seldom be unitary. Silk fabrics are no exception to this. There are different modes/channels of distributing the products in the market. Each channel requires a special type of promotional strategy to promote sales. Some of the efforts like advertising campaign shall yield desired results of increase in sales only when coupled with other promotional measures like dealer discounts, display of products, incentive to the dealers/agents, extended credit period, etc. But in the case of traditional clusters like that of Kanchipuram, hurdles like that of traditional mindset, bureaucratic approach and lack of professional market planning, badly affect the market prospects. Hence it becomes imperative to gain a clearer understanding of the market to hit the bull's eye and win the game.

As an attempt in this direction, the channel-wise segmentation of the market of select cooperatives has been attempted in the study. While the private master weavers have their own channels like their retail

outlet/showroom, direct selling to the business buyers, etc., the Cooperatives have five main channels to distribute their products. They are Co-optex showrooms, exhibitions, Independent showrooms (local and outstation), common showrooms and agency showrooms (within Tamilnadu and in other states). While private retail majors like Pothys, Chennai Silks, RmKV, etc., are the major business buyers for private retailers/master weavers, it is Co-optex, the apex of cooperatives in Tamilnadu and the authorized agency showrooms for the Cooperative sector.

It could be observed from the table that majority (47.44 per cent) of the sales was through the agency showrooms within Tamilnadu (42.13 per cent) and in other states (5.31 per cent)), followed by sales in independent showrooms (41.51 per cent) and Co-optex (9.72 per cent). It is important to note that out of the total sales a little more than one third happened at Kanchipuram. Though the agency showrooms accounted for higher sales than Cooptex, it should be kept in mind that it is a cumulative effect of about 25 agencies spread across Tamilnadu and six agencies located in Andhra Pradesh and three in Karnataka. Exhibitions have not been a very lucrative channel since it is aimed more at popularizing the products rather than sales. With attractive promotional strategies like dealer discounts, credit period, etc., the agency channel can be strengthened to reach out to a larger number of customers.

While, the private retailers/master weavers can explore possibilities of internationalization through private retail houses like Pothys, Chennai Silks, Kumaran, Nalli etc., the Cooperative sector can capitalize on the established linkages of Co-optex and agency showrooms, thereby exploring possibilities of internationalization of the cluster.

Table 4.14

கொத்தகாரர்களின் வியாபாரத்தின் பகுப்பாய்வு (in percentages)

S.No.	Location	Percentage of Sales	Cumulative
1	Cooptex	8.16	8.16
2	Exhibition sales	0.23	0.23
	<b>Within Tamilnadu</b>		
3	Chennai	3.16	
4	Coimbatore	2.95	
5	Salem	8.4	
6	Kanchipuram	34.02	
7	Erode	7.5	
8	Dharmapuri	0.65	
9	Karaikudi	2.01	
10	Kovilpatti	0.42	
11	Krishnagiri	0.1	
12	Madurai	14.4	
13	Pondicherry	0.21	
14	Ramanathapuram	0.09	
15	Sivakasi	3.53	
16	Tanjore	0.15	
17	Tirunelveli	0.33	
18	Trichy	3.32	
19	Villupuram	1.51	
20	Virudhunagar	3.55	86.30
	<b>Other States</b>		
21	Karnataka	0.09	
22	Andhrapradesh	5.22	5.31
	<b>Total</b>	<b>100</b>	<b>100</b>

Source: Records of Cooperatives

Geographical segmentation is essential to identify the target market and focus the marketing efforts towards it and explore possibilities for expansion of the market to the unexplored destinations. But in traditional clusters like that of Kanchipuram silk, seldom such an exercise is carried out to scientifically understand the market and plan the marketing efforts accordingly. Marketing requirements differ from market to market. Each geographical segment shall have its own demographics, tastes and preferences of consumers and purchasing power. Based on these elements, the marketing efforts need to be planned uniquely for each geographic segment to reap profits. Even an excellent product, poorly marketed, is bound to fail. But due to the handicaps of

bureaucratic approach and absence of professional skills, the Co-operatives lag behind in such measures.

A small attempt in this direction to segment the market for the silk fabrics produced by the Silk Cooperatives in Kanchipuram has been furnished in the table 4.14. It could be observed that there is a clear concentration of the market within Tamilnadu with about 86.30 per cent of the sales happening within the state. Co-optex and its branches accounted for a little less than one-tenth of the sales. Only about 5.31 per cent of the sales was through outlets in other states, with a major consumption in Andhra Pradesh (5.31 percent) the reasons being cultural factors and availability of local varieties in the market. But with focused marketing efforts in the other state markets like dealer discounts, credit facilities for the sales agents shall yield desired results.

With the established marketing infrastructure available with Co-optex in the form of '*Co-optex international*', the export prospects of silk fabrics produced in the cluster can be explored. While the private sector weavers and master weavers can explore the possibilities of internationalization through the private retail majors of Chennai like Pothys, Chennai Silks and RmKV, the Cooptex route shall prove viable and effective for the Cooperative sector. In the case of leather sector the Council for Leather Exports - CLE (the leather export promotion council) conducts the export market studies, arranges for business exchanges and organizes/facilitates participation in trade fairs, thereby helping the industry to prosper by business expansion. CLE works in close cooperation with the industry association - Indian Shoe Federation which adds strength to their initiatives. A similar effort shall be helpful for this sector.

With the centrality of 'welfare-orientation' as the purpose of its existence, it is imperative for the Cooperatives to prosper and provide continuous employment to the weaver members under its fold. Such exploration of markets and follow up initiatives through Co-optex shall be helpful for the Cooperatives. Moreover, expansion to other states by strengthening ties with sales agents and scaling up infrastructure and promotional programmes within Tamilnadu shall prove effective in boosting the sales of Cooperatives.



Table 4,15

**Sales through Loom World**

<b>S.No.</b>	<b>Location of the Branch</b>	<b>Percentage of total sales</b>
1	Anna Nagar, Chennai	0.68
2	Egmore, Chennai	1.56
3	Anna Salai, Chennai	0.92
4	Erode	4.92
5	Coimbatore	0.90
6	Madurai	0.00
7	Dharmapuri	0.00
8	Pondicherry	0.18
9	Trichy	0.99
10	Kanchipuram	0.71
	<b>Total</b>	<b>10.86</b>

Source: Records of Cooperatives

Though efforts like introduction of unique symbol for Co-operatives were initiated, the problem of bogus cooperatives and misnomers are the order of the day. With the crowding of shops in a single locality, lack of awareness and resultant inability of the customers to identify the original cooperatives, there has been loss of business to the co-operatives. In this scenario, as a panacea to this problem and to promote the marketing of handloom products produced by the members of Weavers Cooperative Societies, the Directorate of Handlooms and Textiles devised an innovative concept called “Loom *World*” chain of retail outlets, which shall serve as a one-stop shop for all wedding purchases. The brand “Loom World” was promoted aggressively to popularize

the concept among the members of the public. The first loom world was opened during 2000 at Anna nagar by renaming the existing “Tamilnadu Handloom Cooperative Marketing Complex”. Subsequently, three “Loom World” complexes were opened at Erode, Coimbatore and Trichy. Besides, the complexes at Egmore, AnnaSalai, Madurai, Dharmapuri, Pondicherry, and Kanchipuram were renamed as Loom world showrooms.

With a curiosity to understand the effectiveness of this concept in capturing the market, an attempt was made to find out the percent of sales through ‘Loom World’ outlets for the select cooperatives. It is encouraging to find that a little more than one-tenth of the total sales (vide table □□□□□ in the recent periods have been through ‘Loom World’. Out of all, the Erode outlet has been more successful in closing business with about 4.92 per cent of the customers and has accounted for nearly half of the business through all such outlets. Hence, it is worthy to concentrate on this channel for cooperatives to capitalize the existing market and explore further possibilities. (See Case study - Loom World - All under one roof).

Though there are many Cooperatives functioning at Kanchipuram, it could be observed from the analysis that a very few of them have been run with profit. Declining membership, erosion of share capital, decline in sales and production are some common features observed across Cooperatives. Only a very few Cooperatives have been able to continue welfare measures like cash advance and bonus paid to members. The market segmentation analysis provides a clear concentration of market for the cluster products in Tamilnadu. Loom World showrooms are emerging as a ray of hope for the weaver Cooperatives.

## Chapter 5

### PROFILE OF WEAVERS, MASTERWEAVERS/RETAILERS

*Fine, so fine has this cloth been woven!  
Of what is the warp made, of what the weft?  
Which is the thread that has woven this cloth?*

*A wondrous Weaver wove this cloth,  
with the thread of karma as the warp,  
Memory and attachment as the weft...*

Taken from two poems of Kabir, 15th Century

Kanchipuram Silk commands market throughout India, and in foreign countries like Ceylon, Burma, Malaysia, France, Italy and United States of America. Kanchipuram is famous for “Tissue” sarees (silk and lace interwoven) produced in different sizes ranging from 24 inches to 52 inches in width and from 18 feet to 30 feet in length with attractive borders and variegated designs and colours. The Kanchipuram sarees, generally made of pure silk are woven with three shuttles to give solid border effect. The interlocking of the border of a saree with the body is a characteristic feature of the double-coloured saree, which is popularly called ‘Korvai’. One more special feature of Kanchipuram silk saree is the end piece (pallu) with elaborate designs, which is weaved separately and later attached to the body, without any flaw on the outer side.

Weaving of silk saree is a cottage industry involving the whole family including children from winding of the yarn on the bobbins to working the shuttle during weaving. The yarn after being washed is dyed in fast colours. Silk dealers in private sector, barring a few, get a substantial part of their goods woven from the master weavers, who act as intermediary between the weavers and dealers. The raw materials for weaving are provided by either the master weaver in the case of private or the cooperatives (to their members).

This chapter presents the features the socio economic profile of the weaver and masterweavers/retailers, their production and marketing linkages, financial sources, aspects of training and major problems faced in production and marketing.

In the system of handloom weaving, there are two common methods of classifying the weaver. They either are independent weavers with their own looms or shall be attached to a master weaver under whom they work. With the advent of Cooperatives in the Kanchipuram silk weaving, like a private master weaver, the cooperatives also became an important category. But due to seasonal demands, losses in cooperatives and shortage of orders, the weavers do not strictly restrict themselves to a single category. Hence, in this study, the weavers have been classified into five categories viz., independent weavers, those who were attached to master weavers, those who were members of weaver cooperatives, those who weaved both independently and for the cooperatives, and those who were independent weavers and also weaved for private master weavers.

#### □□□□ 5.1

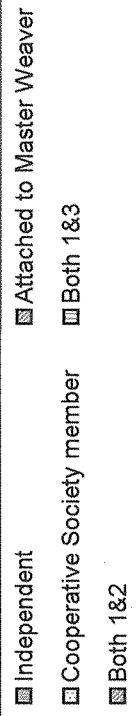
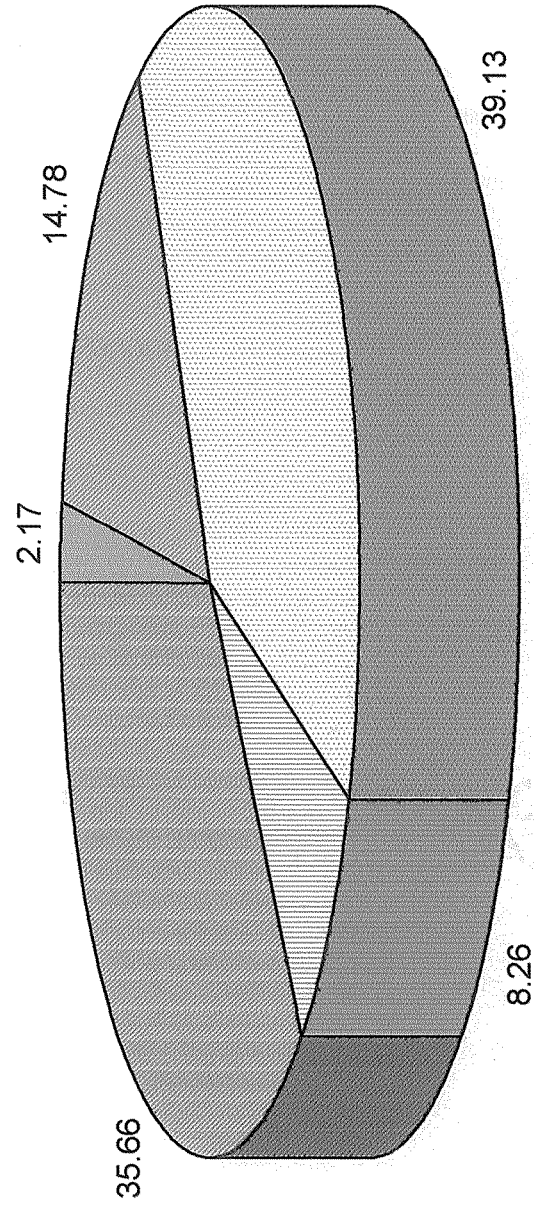
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S.No	Type of Weaver	No. of weavers
1	Independent	5 (2.17)
2	Attached to Master Weaver	34 (14.78)
3	Cooperative Society member	90 (39.13)
4	Both 1&3	19 (8.26)
5	Both 1&2	82 (35.66)
	Total	<b>230</b> <b>(100)</b>

Figures in the parenthesis denote column percentages

Majority (39.13 per cent) of the respondents were members of cooperative societies followed by the combination of both independent and attached to a private master weaver category (35.66 per cent) (vide table 5.1). A tiny proportion of respondents (2.17 per cent) were independent weavers since it is very difficult in the prevailing scenario to survive out of both the dominant systems.

**Fig.5.1**  
**Typology of Weavers**



**Table 5.2**  
**□□□ of the Weavers**

S.No	Type of Weaver	Age of the respondent (years)			Total
		16 to 33	33 to 50	50 and above	
1	Independent	0 (0)	3 (2.01)	2 (4.55)	5 (2.17)
2	Attached to Master Weaver	6 (16.22)	23 (15.44)	5 (11.36)	34 (14.78)
3	Cooperative Society member	14 (37.84)	64 (42.95)	12 (27.27)	90 (39.13)
4	Both 1&3	1 (2.70)	13 (8.73)	5 (11.36)	19 (8.26)
5	Both 1&2	16 (43.24)	46 (30.87)	20 (45.46)	82 (35.66)
	<b>Total</b>	<b>37 (16.09)</b>	<b>149 (64.78)</b>	<b>44 (19.13)</b>	<b>230 (100)</b>

Figures in the parenthesis denote percentages

Weaving is an art which is intricate as well as strenuous. Two aspects are associated with the age of the weaver - one being the weaver's ability to physically withstand the strain of handloom weaving and the experience in the art for creating intricate artistic designs. In the case of Kanchipuram silk sarees, finer the intricacy of the design, the weight of yarn and zari to be handled along with the design punch cards on the loom increases proportionately. Both age and ability to withstand strain due to weaving are inversely proportional. But being a traditional art, it is essential that one has to be on-the-loom to master the craft. The number of young people associated with the handlooms assures the survival of the art for coming years.

Table 5.2 presents the age-wise classification of the respondents. Majority (64.78 per cent) of the respondent weavers were middle aged (33 - 50 years). Only about 16.09 percent of the respondents were found in the younger age group of 16-33 years. Within this category, majority of the respondents were attached to private master weavers or were weaving independently and also for master weavers. This is mainly because closure of new membership by Cooperatives and even among the existing members many remained idle. The lesser number of weavers in the younger age category indicates a major threat to survival of the art.

**Table 5.3**  
**Sex-wise classification of Weavers**

S.No	Type of Weaver	Gender		Total
		Male	Female	
1	Independent	2 (1.44)	3 (3.30)	5 (2.17)
2	Attached to Master Weaver	22 (15.83)	12 (13.19)	34 (14.78)
3	Cooperative Society member	54 (38.85)	36 (39.56)	90 (39.13)
4	Both 1&3	13 (9.35)	6 (6.59)	19 (8.26)
5	Both 1&2	48 (34.53)	34 (37.36)	82 (35.66)
	<b>Total</b>	<b>139 (60.43)</b>	<b>91 (39.57)</b>	<b>230 (100)</b>

**Figures in the parenthesis denote percentages**

Weaving is a complex operation. It requires a lot of support and team effort. Though the weavers are predominantly male, it cannot be stamped as male-dominated, because every loom in operation has about 16 pre-loom and post-loom operations, among which a majority of the operations are the domain of women. While men are engaged in the areas of weaving, preparing the loom for weaving, etc., women shall be engaged in spinning the yarn, spinning of zari, preparing some parts of the loom, helping in weave for 'korvai' type sarees where the weft has to be changed simultaneously by a different person along with the weaver. These are no water-tight compartments. The work is always shared among men and women equally. It is also essential for a weaver to have some basic knowledge on the basic operations. Hence, the operations are performed interchangeably without much of gender bias. But, the familial responsibilities of women prevent them from participating actively in the process for a longer duration of time.

Even among the respondents of this study, the trend is reflected, with majority (60.4 per cent) of them being male. Between men and women, majority (39.6 per cent) of the women were members of cooperatives, and a nearly equal proportion (37.4 per cent) were in the combined category of both independent & attached to "master weaver" category. The male weavers also follow the same trend with the majority (38.8 percent) of them weaving exclusively for cooperatives, followed by the combined category of those who weaved both independently and for the master weavers (34.5 per cent).

**Table 5.4**  
**Community of Weavers**

S.No	Type of Weaver	Community		Total
		BC	MBC	
1	Independent	3 (2.44)	2 (1.87)	5 (2.17)
2	Attached to Master Weaver	18 (14.63)	16 (14.95)	34 (14.78)
3	Cooperative Society member	50 (40.65)	40 (37.38)	90 (39.13)
4	Both 1 &3	9 (8.13)	9 (8.42)	19 (8.26)
5	Both 1&2	42 (34.15)	40 (37.38)	82 (35.66)
	<b>Total</b>	<b>123 (53.48)</b>	<b>107 (46.52)</b>	<b>230 (100)</b>

■ figures in the parenthesis denote percentages

Being a traditional industry, there is a grand history behind the communities which are involved in the silk weaving industry. The above table shows the classification of respondents based on their community. From the table 5.4 it is found that among the respondents about a little more than half of them belonged to backward community (53.48 per cent) followed by most backward community (46.52 per cent).

In early days, the silk weaving was the domain of a merchant community from Sourashtra, who were said to have settled in Kanchipuram during Vijayanagara dynasty. The silk fabric being the royal accessory had grown up with the patronage of the princely class. Kanchipuram with its own grand history from 3 B.C. (Sangam literature period) was one of the earliest capital cities of the ancient rulers like Thondaman Ilantharayan (1 B.C.), Pallavas (7 A.D.), and occupied an important place in the reigns of Cholas (10 - 12 A.D.) , Vijayanagara Dynasty (12 A.D. to 16 A.D.), Mughal Nawab of Arcot (17 A.D. - 18 A.D.) and Colonial Rule (19 A.D.). During this period it grew as a temple city with intensive sculpting activity. The skilled craftsmen were brought in from different regions for temple construction. The royal interest in temples and worship encouraged the



growth of the silk industry in the temple town. The weavers, who were skilled in cotton weaving, were taught the art of silk weaving.

During the reign of Arcot Nawab(17 A.D.-18 A.D.), fearing the muslim domination the Sourashtra Hindus migrated to various places like Kanchipuram, Arni (outskirts of Vellore district), Salem, Madurai and Kumbakonam. With their dexterity in silk weaving, they continued their activities in their places of settlement and this resulted in knowledge transfer to the local communities at the places of their settlement.

It is said that a few local merchant communities like '*Senguntha Mudaliars*' and '*Devanga Chettiars*' learnt this art from the Sourashtra people. It is also believed that these communities were dominating this art because the fine silk thread had to be handled gently with soft hands. The soft hand texture of these communities were suitable for this trade, hence their domination. Slowly, the art also spread to other communities who served as labourers in the looms.

Moreover, the lesser wages in cotton weaving and the lucrative wages in the silk weaving activity also attracted weavers from other communities to silk weaving.

Since the early communities trading in silk, became rich they employed other communities under them as weavers which paved the way for involvement of different classes in the art.

Even today, there is a division of labour according to community. In the looms, for the silk thread to be inserted into the warp a lengthy plate of comb like structure, called *pannai*, is prepared out of corn stem. This particular activity is dominated by members of Muslim Community. Apart from them, a particular backward community called 'Aiyers' are also involved in *pannai* making.

**Table 5.5**  
**Literacy Status of Weavers**

S.No	Type of Weaver	Literacy Status						
		Illiterate	Primary	Middle	Secondary	HSC	Graduate	Total
1	Independent	2 (2.78)	3 (3.06)	0 (0)	0 (0)	0 (0)	0 (0)	5 (2.17)
2	Attached to Master Weaver	13 (18.06)	10 (10.20)	8 (17.39)	2 (22.22)	0 (0)	1 (25)	34 (14.78)
3	Cooperative Society member	26 (36.11)	42 (42.86)	18 (39.13)	4 (44.45)	0 (0)	0 (0)	90 (39.13)
4	Both 1&3	8 (11.11)	7 (7.14)	4 (8.70)	0 (0)	0 (0)	0 (0)	19 (8.26)
5	Both 1&2	23 (31.94)	36 (36.73)	16 (34.78)	3 (33.33)	1 (100)	3 (75)	82 (35.66)
	<b>Total</b>	<b>72 (31.30)</b>	<b>98 (42.62)</b>	<b>46 (20)</b>	<b>9 (3.91)</b>	<b>1 (0.43)</b>	<b>4 (1.74)</b>	<b>230 (100)</b>

**Figures in the parenthesis denote percentages**

Among the weavers, about one third of the respondents were illiterates. About 42.62 per cent of them were primary educated. Though the level of literacy has a lesser relevance to the art of weaving, which has to be learnt on the job and the techniques have to be imbibed through observation and practice, it is important for the other aspects like understanding the developments in market, acquisition of knowledge in new technologies, handling of technologies like computers for designing and punch card making purposes. Only about 2 percent of the respondents were graduates.

One of the main reasons for lesser level of literacy among weavers is their economic situation. Since weaving is a labour intensive activity, it involves continuous engagement in the activity during day time. Hence the opportunity of attending schools becomes unavailable for those involved in weaving. Being a livelihood activity, working 'in looms became the priority to formal education. Moreover, the options for the educated are wider. Hence the movement of better educated to other jobs, leaves the less educated for the enterprise.

But this low level of education looms up as a problem in the cluster since the transfer of new technology poses a challenge to the technical institutions like Central Silk Board and Weavers Service Centre and support institutions like Cooperative Societies, due to lack of awareness and traditional outlook of the cluster members.

**Table 5.6**  
**Place of acquiring the basic training by Weavers**

S.No	Type of Weaver	Acquisition of the basic training		Total
		On the job	Family	
1	Independent	4 (3.67)	1 (0.83)	5 (2.17)
2	Attached to Master Weaver	11 (10.1)	23 (19.0)	34 (14.78)
3	Cooperative Society member	42 (38.53)	48 (39.67)	90 (39.13)
4	Both 1&3	7 (6.42)	12 (9.92)	19 (8.26)
5	Both 1&2	45 (41.28)	37 (30.58)	82 (35.66)
	<b>Total</b>	<b>109 (47.39)</b>	<b>121 (52.61)</b>	<b>230 (100)</b>

Figures in the parenthesis denote percentages

The art of weaving will have to be learnt by working on the loom. Seldom is any formal course in vogue to train people in such skills. The child in a weaver's house plays with the weaving implements, learns spinning at the tender age of five, starts sitting on the loom from the age of seven and becomes a full fledged weaver at the end of its teens. On the other hand, a worker who joins the loom for a wage, by the passage of time through socialization and observation, learns the art and becomes a full fledged weaver over a period of time. Thus the art is learnt as a way of life.

This fact is also reflected in the study, as shown in the table. About a little more than half of the respondents have acquired their basic training in weaving from their family (52.61 per cent) and the rest (47.39 per cent) have begun their career as workers in looms and have graduated to be weavers of their own at a later period of time.

**Table 5.7****Classification of respondents by Type of House and ownership**

S.No	Type of House	House Type			Total
		Tiled	Pucca	Group house	
1	Own	72 (53.73)	7 (28)	61 (85.92)	140 (60.87)
2	Rented	36 (26.87)	12 (48)	10 (14.08)	58 (25.22)
3	Leased	26 (19.40)	6 (24)	0 (0)	32 (13.91)
	<b>Total</b>	<b>134 (58.26)</b>	<b>25 (10.87)</b>	<b>71 (30.87)</b>	<b>230 (100)</b>

Figures in the parenthesis denote percentages

The life style of weavers is intertwined with their art of weaving. Their dwellings are no exception to this. It is a common feature in Kanchipuram that the houses have a lengthy passage from the entrance to the backyard and the rooms aligned on one side of the passage. This is mainly to facilitate drying the dyed yarn and to remove the knots present across the warp/weft. The above table presents the different types of dwellings that accommodate the respondents and their weave. It is found that a majority (58.26 per cent) of them lived in tiled houses, which reflected their 'hand-to-mouth' existence. Some of the members of bigger cooperatives were beneficiaries of 'Group house' scheme and lived in those houses. About 30.87 per cent of the respondents lived in group houses. Only about a ten percent of the respondents lived in *pucca* houses.

An interesting feature reflecting the field reality is that about 14.08 per cent of those who lived in group houses were living there for rent. They were neither members of cooperatives nor the beneficiaries of group house scheme. Most of the group house colonies were situated about 3-4 kilometres away from the main town. Hence some society members, established well at the town, do not wish a shift to the housing colonies. Such houses have been rented out to other weavers who were either non-members of cooperatives or to those members who were unable to avail such benefit. Moreover the residents of group houses faced lot of difficulties viz., lack of proper infrastructure like road, lighting, drinking water facilities, sanitation, security, etc. Most of the houses in a particular colony have broken ceilings through which rain water seeps in and spoils the sarees on looms. The tarpaulins spread on the roof as a solution to this retains too much of heat and makes the stay inside the house a challenge during summer. The poor income of these weavers prevents them from paying the installments on time and most of them do not know the duration of repayment and title transfer.

**Table 5.8**  
**Classification of Weaver Respondents by ownership of house**

S.No	Type of Weaver	Ownership of house			Total
		Own	Rented	Leased	
1	Independent	4 (2.86)	0 0	1 (3.12)	5 (2.17)
2	Attached to Master Weaver	20 (14.29)	10 (17.24)	4 (12.50)	34 (14.78)
3	Cooperative Society member	56 (40.0)	21 (36.21)	13 (40.63)	90 (39.13)
4	Both 1&3	13 (9.29)	4 (6.90)	2 (6.25)	19 (8.26)
5	Both 1&2	47 (33.57)	23 (39.65)	12 (37.50)	82 (35.66)
	<b>Total</b>	<b>140 (60.87)</b>	<b>58 (25.22)</b>	<b>32 (13.91)</b>	<b>230 (100)</b>

Figures in the parenthesis denote percentages

The above table shows the classification of weaver respondents based on ownership of house, it is found that majority (60.87 per cent) of the respondents owned the houses in which they lived. While about one-fourth of the respondents lived in rented houses, the rest (13.91 percent) lived in leased houses.

Among the respondents, members of Cooperatives were the largest group with own houses (40 per cent) being the beneficiaries of group house scheme. While majority (39.65 per cent) of the weavers in private fold who weaved both independently and for master weavers, resided in rented houses they were also the second largest group (33.57 per cent) with own houses.

Leasing of houses is a common feature in Kanchipuram. Weaving being a seasonal occupation, the income shall not be regular for the weaver. Whenever they get bulk money, they make arrangements for their livelihood. One of such arrangements is leasing of houses paying a lump sum. This helps in avoiding the monthly rent burden. About 13.91 percent of the respondents lived in leased houses.

Moreover, installing looms in a rented house shall be a big difficulty and it is not easy to shift the loom. Hence, the weavers prefer an own house or a leased accommodation to house their looms and themselves.

**Table 5.9**  
**Weaving Experience (years)**

S.No	Type of Weaver	Years of Weaving				Total
		10 to 15	16 to 22	23 to 30	31 and above	
1	Independent	0 (0)	2 (2.15)	2 (2.8)	1 (3.4)	5 (2.17)
2	Attached to Master Weaver	5 (13.51)	6 (6.45)	15 (21.1)	8 (27.6)	34 (14.78)
3	Cooperative Society member	15 (40.54)	39 (41.94)	25 (35.2)	11 (37.9)	90 (39.13)
4	Both 1&3	2 (5.41)	6 (6.45)	7 (9.9)	4 (13.8)	19 (8.26)
5	Both 1&2	15 (40.54)	40 (43.01)	22 (31.0)	5 (17.2)	82 (35.66)
	<b>Total</b>	<b>37 (16.09)</b>	<b>93 (40.43)</b>	<b>71 (30.87)</b>	<b>29 (12.61)</b>	<b>230 (100)</b>

Figures in the parenthesis denote percentages

Weaving is an art that gets enriched with the experience of an individual with that art. Nuances of weaving and artistic design come through continuous engagement in the profession through the development of 'functional specialisation'. Since practice brings perfection, it is essential to estimate the years of weaving experience of the weaver respondents.

It could be observed that above 70 per cent of the respondents (vide table 5.9) were having a minimum of 16 years to a maximum of three decades of weaving experience. About 12.61 percent of the respondents had a weaving experience of 31 years and more. But under this category, active weaving is less, due to the age factor. The active weavers were found in the middle category of 16 - 30 years.

Since the Cooperatives have closed their gates for member enrolment, people with lesser experience/ youngsters are outside the fold of cooperatives. Moreover this category consists of the weavers who are new entrants to the field attracted by the industry during its boom period. Now it is facing a severe recession with lot of looms becoming inactive without work, thus creating an aversion among the younger generation.

**Table 5.10**  
**Type of loom used**

S.No	Type of Weaver	Type of loom		Total
		Pit loom	Raised Pit loom	
1	Independent	4 (2.86)	1 (1.11)	5 (2.17)
2	Attached to Master Weaver	22 (15.71)	12 (13.34)	34 (14.78)
3	Cooperative Society member	41 (29.29)	49 (54.44)	90 (39.13)
4	Both 1&3	12 (8.57)	7 (7.78)	19 (8.26)
5	Both 1&2	61 (43.57)	21 (23.33)	82 (35.66)
	<b>Total</b>	<b>140 (60.87)</b>	<b>90 (39.13)</b>	<b>230 (100)</b>

■figures in the parenthesis denote percentages

Chi square value 16.175 @ 0.003 df = 4.

Looms and weavers are inseparable elements of weaving. There are various types of looms used in handloom weaving. The type of loom is unique in every handloom cluster and it gives a special effect to the fabric woven on the loom. The specialty of Kanchipuram loom is in the '*adaf*' or '*naksha*' for the evolution of the designs for which the Kanchipuram Sarees are famous. Besides, Jacquard is used in looms, in some cases, frames are used for the sley and there is a frame attached for both dobby and *jala*. Kanchipuram *Jala* is unique in the method of selection and lifting of the warp ends for the designs. It is different from that used in the Banaras looms.

The above table presents the classification of types of looms used by the weaver respondents. While majority (60.87 per cent) of the respondents worked on pit-looms, the rest (39.13 per cent) used 'raised' pit looms. A majority (62.17 per cent) of the respondents who were attached with master weavers and those who weaved independently used pit looms. The weavers who weaved for cooperatives (54.44 per cent) and living in housing colonies of the cooperative society used 'raised' pit looms. The chi-square value is also significant for the type of looms used by different categories of weavers.

S.No	Type of Weaver	No. of looms			Total
		1	2	3	
1	Independent	3 (2.78)	2 (1.80)	0 (0)	5 (2.17)
2	Attached to Master Weaver	6 (5.56)	26 (23.42)	2 (18.18)	34 (14.78)
3	Cooperative Society member	47 (43.52)	39 (35.14)	4 (36.36)	90 (39.13)
4	Both 1&3	(6.48)	10 (9.01)	2 (18.18)	19 (8.26)
5	Both 1&2	45 (41.66)	34 (30.63)	3 (27.27)	82 (35.66)
	<b>Total</b>	<b>108 (46.96)</b>	<b>111 (48.26)</b>	<b>11 (4.78)</b>	<b>230 (100)</b>

Figures in the parenthesis denote percentages

The loom and the weaver are indivisible elements of a silk saree which is an exquisite piece of art. The number of looms on which the weaver works depends upon the floor area he has in his house, availability of human capital and availability of market for the products. In Kanchipuram, pit looms and raised pit looms are widely in use. These days, the market is dwindling, the income is low and lucrative employment opportunities are emerging in other avenues. In such a scenario, the numbers of looms that are active keep dwindling. On an average, only about 57.23 percent of the looms are found to be active (vide table 4.1).

The table 5.11 presents the details of numbers of looms operated by the respondents. About 48.26 per cent of the respondents operated two looms closely followed by those who operate a single loom (46.96 per cent). Only about 4.78 per cent of the respondents were found to operate three looms. These weavers were producing both silk sarees and silk skirts which require different looms. But majority of them concentrated on silk saree weaving since its movement in the market was better than that of silk skirts.



**Fig.5.2**  
**Number of Looms Operated**

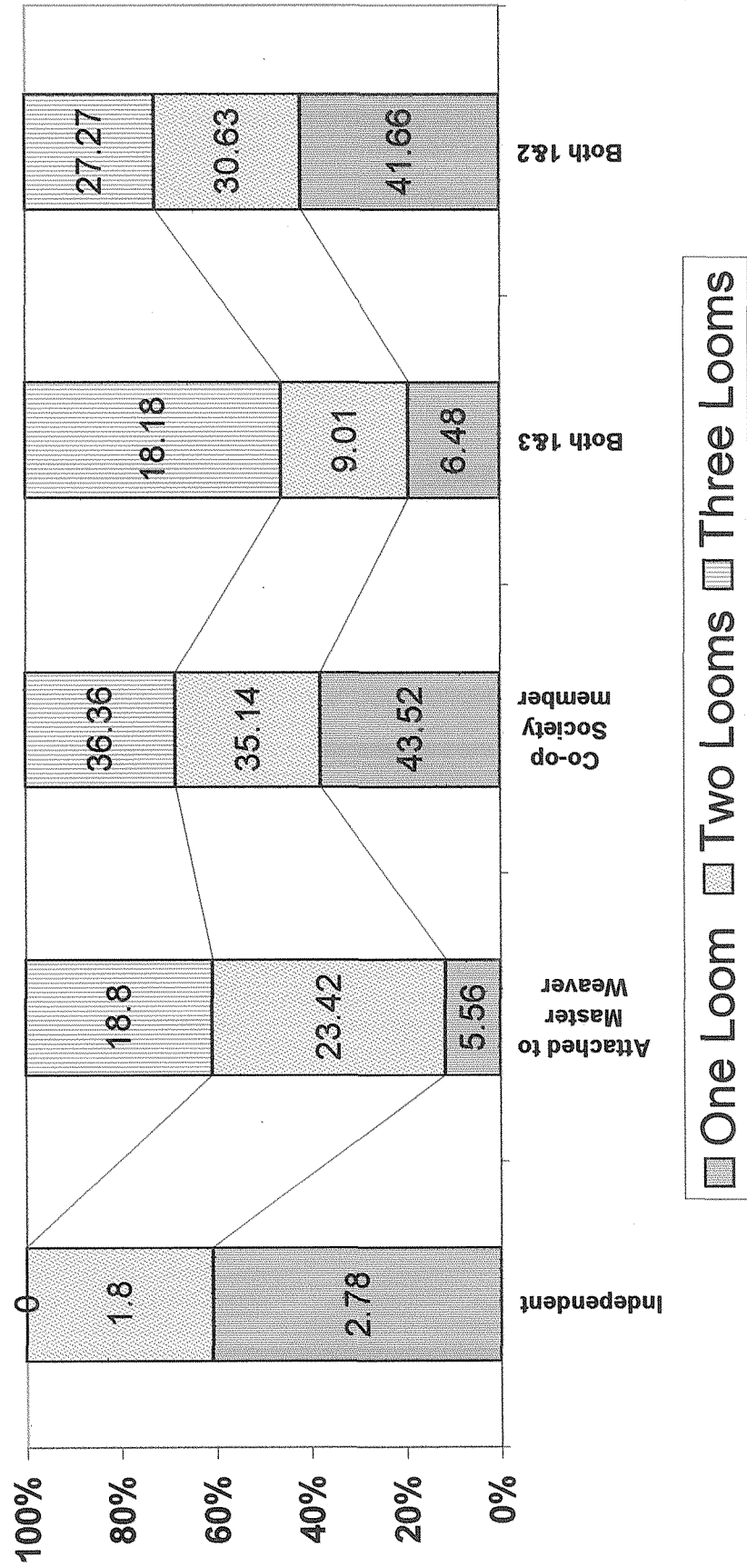


Table 5.12

**Modifications made in looms recently**

S.No	Type of Weaver	Modifications done in looms recently		Total
		Yes	No	
1	Independent	1 (2.38)	4 (2.13)	5 (2.17)
2	Attached to Master Weaver	9 (21.43)	25 (13.29)	34 (14.78)
3	Cooperative Society member	14 (33.33)	76 (40.43)	90 (39.13)
4	Both 1&3	4 (9.52)	15 (7.98)	19 (8.26)
5	Both 1&2	14 (33.33)	68 (36.17)	82 (35.66)
	<b>Total</b>	<b>42 (18.26)</b>	<b>188 (81.74)</b>	<b>230 (100)</b>

Figures in the parenthesis denote percentages

Modification in the production equipment is a major indicator for technology upgradation in the production process. With the modifications being made in looms, the drudgery of weavers shall reduce to a great extent. For example, the replacement of *adai* with jacquard boxes makes it easier to change the designs. Extensive research is being conducted by Central Silk Technology and Research Institute (CSTRI), Central Silk Board (CSB), Indian Institute of Handloom Technology (IIHT) and Weavers Service Centre (WSC), in modification of looms. But in the case of handlooms, there is also a danger of the unique speciality of the product, getting affected, through replacement of such traditional methods. In spite of the efforts by these institutions and support by the government, adoption of technology and modification of production equipment has been low, due to the traditional attitude, financial constraints and lack of awareness among the weavers.

In this background, the above table presents the information on modification of looms by the respondents. Majority (81.74 per cent) of the respondents have not made any modification in their looms in the recent period. They are complacent with the available technology and resort to repairing the looms locally at times of necessity. The main reasons for aversion to modification in looms were lack of awareness, procedural difficulties in obtaining the government support, financial constraints and skepticism about the viability of new technology.

### Weaving - Jacquard / Adai

S.No	Type of Weaver	Weaving technique used			Total
		Jacquard	Adai	Both	
1	Independent	3 (2.14)	2 (2.56)	0 (0)	5 (2.17)
2	Attached to Master Weaver	22 (15.71)	10 (12.82)	2 (16.67)	34 (14.78)
3	Cooperative Society member	52 (37.15)	34 (43.59)	4 (33.33)	90 (39.13)
4	Both 1&3	12 (8.57)	5 (6.41)	2 (16.67)	19 (8.26)
5	Both 1&2	51 (36.43)	27 (34.62)	4 (33.33)	82 (35.66)
	Total	140 (60.87)	78 (33.91)	12 (5.22)	230 (100)

Figures in the parenthesis denote percentages

In Kanchipuram loom, the speciality lies in the '*adaf*' (the special threads/ropes attached to the loom) or '*naksha*' for the evolution of the designs. In case of '*adaf*', graph paper design has to be prepared showing the interlacements of threads. This design is transferred to the harness of the '*adai*' with the help of a trained assistant. In a Banaras loom, *naksha* is prepared straight without this intermediate stage of a graph paper design. In *adai*, the strings are horizontally arranged. Whenever, new set of designs is woven, the horizontal strings are united, the old loops removed and the new loops tied on to it. In Banaras loom, the horizontal threads or the *pagias* remain untouched and the *naksha* takes less time than the preparation of *adai*. Besides, Jacquard is used in looms; in some cases, frames are used for the sley and there is a frame attached for both *dobby* and *jala*. Kanchipuram *Jala* is unique in the method of selection and lifting of the warp ■ ends for the designs. It is different from that used in the Banaras looms. (See the section - Kanchipuram Silk - What makes it unique? in Chapter I)

The above table gives the classification of the respondents based on the usage of *adai/Jacquard* in their looms. It is found that majority of the respondents (60.87 per cent) were found to have employed Jacquard in their looms, followed by those who used the traditional *adai* technique (33.91 per cent). About 5.22 per cent of the respondents were found to use both *adai* and *Jacquard*, since they had more than one loom in operation.

**No. of □□□□□ members involved in the enterprise**

S.No	Type of Weaver	No. of family members involved in the enterprise			Total
		1	2	3	
1	Independent	3 (2.78)	2 (1.80)	0 (0)	5 (2.17)
2	Attached to Master Weaver	6 (5.56)	26 (23.42)	2 (18.18)	34 (14.78)
3	Cooperative Society member	47 (43.52)	39 (35.14)	4 (36.36)	90 (39.13)
4	Both 1&3	7 (6.48)	10 (9.01)	2 (18.18)	19 (8.26)
5	Both 1&2	45 (41.66)	34 (30.63)	3 (27.28)	82 (35.66)
	<b>Total</b>	<b>108 (46.97)</b>	<b>111 (48.26)</b>	<b>11 (4.77)</b>	<b>230 (100)</b>

Figures in the parenthesis denote percentages

Since weaving necessitates involvement of more than two members, often the family members are involved or labourers are employed on wages. With the meager income that the weaver earns, it shall not be economical to employ people for wages. Normally the family members are involved in the process that shall give the flexibility of working hours as well as savings in wages.

In majority of the cases (48.26 per cent) on an average, about 2 members of the family were involved in weaving activity apart from the respondent (vide table 5.14). In the case of about 46.97 percent of the respondents only one member from the family helped in weaving, which in most of the cases were their spouse or wards.

Only in about 4.77 per cent of the cases, three members from the family were involved in the enterprise. Though more number of people get involved in the activity, the returns are not commensurate with the number employed. Of late, the weavers themselves discourage their wards/spouse to involve in the activity and encourage them to pursue education and take up other employment avenues, even an unskilled labour in the nearby industrial parks.

□□□□□ □□□□  
**Wages □□□□□□ per □□□□□**

S.No	Type of Weaver	Wages Earned (per annum)					Total
		3501 - 7000	7001 - 10500	10501 - 14000	14001 - 17500	17501 and above	
1	Independent	0 (0)	3 (2.88)	0 (0)	0 (0)	2 (5.88)	5 (2.17)
2	Attached to Master Weaver	0 (0)	13 (12.50)	0 (0)	7 (21.21)	14 (41.18)	34 (14.78)
3	Cooperative Society member	47 (87.04)	39 (37.50)	0 (0)	4 (12.12)	0 (0)	90 (39.13)
4	Both 1&3	7 (12.96)	10 (9.62)	0 (0)	2 (6.06)	0 (0)	19 (8.26)
5	Both 1&2	0 (0)	39 (37.50)	5 (100.0)	20 (60.61)	18 (52.94)	82 (35.66)
	<b>Total</b>	<b>54 (23.48)</b>	<b>104 (45.22)</b>	<b>5 (2.17)</b>	<b>33 (14.35)</b>	<b>34 (14.78)</b>	<b>230 (100)</b>

Figures in the parenthesis denote percentages

The dexterous weavers those who create artistic pieces of silk sarees with exquisite designs are earning only pittance as their wages. A weaver who creates a saree worth Rs. 10,000/- from raw silk yarn and zari shall earn a wage of Rs.1000/-, but the retailer's mark up is from 30 to 40 per cent on the saree. The wages are not commensurate with the effort and time that the weaver invests on weaving the silk saree. There is also a wage dichotomy that exists in the Kanchipuram silk cluster. The wage difference between the weavers of Cooperative fold and those of private fold is 40 per cent, i.e., a Cooperative society weaver earns 40 per cent higher wages for the same quality of work. But the delayed supply of raw materials, loan burden, stagnating sales, infrequent orders reduce the earnings of weavers in Cooperatives. In the case of private weavers, they compensate this wage loss by economies of scale, i.e., they produce more to increase their income. But they too are affected by factors like low wages, debt burden, etc.

Less than half (45.22 per cent) of the respondents earned between Rs.7001 to Rs. 10500/- as wages per annum. About 23.48 per cent of the respondents earned below Rs.7000/- as wages per annum.

# Table 5.16

Number of days employed by weavers in a year

S.No	Type of Weaver	No. of Days Employee				Total
		Less than 100	101 -200	201 - 300	301 and Above	
1	Independent	0 (0)	3 (2.76)	0 (0)	2 (3.28)	5 (2.17)
2	Attached to Master Weaver	0 (0)	12 (11.01)	0 (0)	22 (36.07)	34 (14.78)
3	Cooperative Society member	47 (87.04)	39 (35.78)	4 (66.67)	0 (0)	90 (39.13)
4	Both 1&3	7 (12.96)	10 (9.17)	2 (33.33)	0 (0)	19 (8.26)
5	Both 1&2	0 (0)	45 (41.28)	0 (0)	37 (60.65)	82 (35.66)
	<b>Total</b>	<b>54 (23.48)</b>	<b>109 (47.39)</b>	<b>6 (2.61)</b>	<b>61 (26.52)</b>	<b>230 (100)</b>

Figures in the parenthesis denote percentages

Handloom weaving is seasonal and it gets affected by both climatic factors as well as market demand. When there is a slack in demand in the market the weavers do not get work. Similarly during the rainy season the loom parts made of wood start to swell leaving the looms unfit for production. Moreover, the silk yarn tied to the loom shall also absorb the moisture and it will not be conducive to weave the wet yarn. Hence they have to wait for the change of season. There is also delay in supply of raw materials in the case of Cooperatives which prevent the weavers from taking up the work.

Majority (47.39 per cent) of the weavers were employed between 101 to 200 days in a year (vide table 5.16). The private weavers, who weave both independently and are attached to master weavers, worked for more than 300 days in a year, for earning a higher income. The weavers in the private fold earn 40 per cent lesser wages when compared to weavers of Cooperatives; hence they have to produce more to earn more wages. Moreover they do not enjoy the benefits of social security measures like bonus, insurance and loan facilities given by Cooperatives. All their requirements have to be met out from their wages. Hence they have to work more number of days and earn more.

**Table 5.17**  
Type of Products produced

S.No	Type of Weaver	Type of Products produced			Total
		Silk Sarees	Silk Skirts	Both 1&2	
1	Independent	5 (2.42)	0 (0)	0 (0)	5 (2.17)
2	Attached to Master Weaver	31 (14.98)	1 (14.29)	2 (12.50)	34 (14.78)
3	Cooperative Society member	82 (39.61)	1 (14.29)	7 (43.75)	90 (39.13)
4	Both 1&3	16 (7.73)	0 (0)	3 (18.75)	19 (8.26)
5	Both 1&2	(35.27)	5 (71.42)	4 (25.0)	82 (35.66)
	<b>Total</b>	<b>207 (90)</b>	<b>7 (3.04)</b>	<b>16 (6.96)</b>	<b>230 (100)</b>

**Figures in the parenthesis denote percentages**

The artistic weaving and intricate craftsmanship of Kanchipuram Silk make each product a unique piece of art. Apart from sarees, silk skirts are also popular with girls. While the sarees are of 6 yards length, the skirts are made in different lengths to suit the requirements of different age groups of girls. To suit the changing fashions a diversification to chudidhars was done by the cluster members. Though the initial response was encouraging for the chudidhars, due to problems in maintenance and availability of cheaper substitutes, it has resulted in lukewarm sales. Hence, the product line has been almost discontinued. Silk dhoti weaving has also been totally discontinued from the cluster long back. Now Salem powerlooms have taken up the production of silk dhothies. The products now produced in Kanchipuram cluster are Silk Sarees and Silk Skirts.

The silk skirts market was also dwindling due to the changes in fashions and trends. Thanks to the efforts of large trade houses in Chennai like RmKV (Cindrella Pavadai), which revived the market by introducing theme-based silk-skirts which captured the attention of customers towards these products.

Weavers associated with Sri Krishna Silk Handloom marketing Society have created two unique theme based designs in the name of Kundavai nachiar, the daughter of Rajaraja Chola, the great ruler of Chola dynasty and Paravai nachiar of the same dynasty. This was done based on an order from Cooptex. Such branding helps in attracting the customers towards the products that start phasing out from the market.

**Fig.5.3**  
**Type of Products Produced**

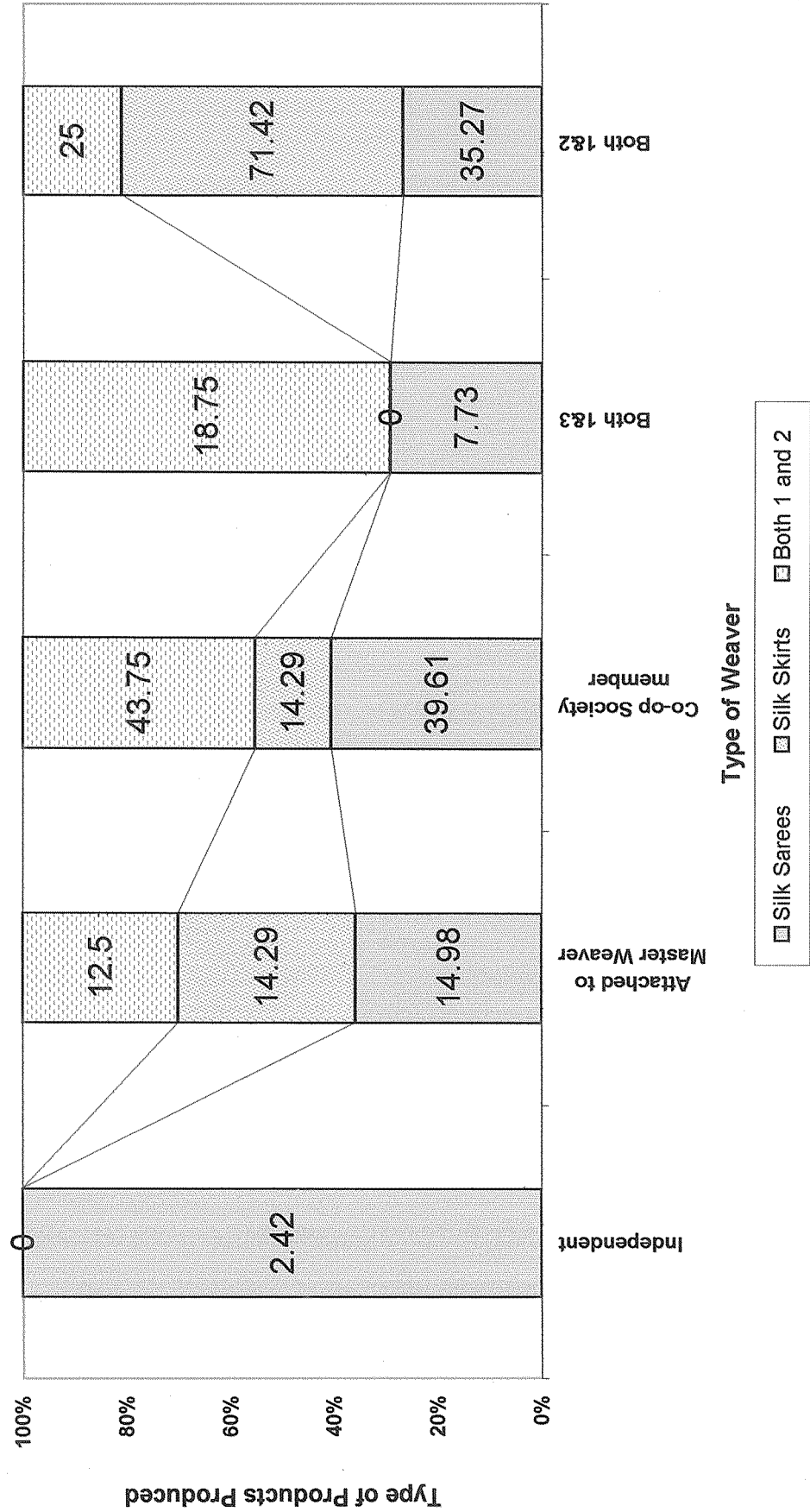




Table 5.18

## Use of computerized designs

S.No	Type of Weaver	Use of computerized designs		Total
		Yes	No	
1	Independent	0 (0)	5 (3.55)	5 (2.17)
2	Attached to Master Weaver	22 (24.72)	12 (8.51)	34 (14.78)
3	Cooperative Society member	17 (19.10)	73 (51.77)	90 (39.13)
4	Both 1&3	12 (13.48)	7 (4.96)	19 (8.26)
5	Both 1&2	38 (42.70)	44 (31.21)	82 (35.66)
	Total	89 (38.70)	141 (61.30)	230 (100)

-figures in the parenthesis denote percentages

Chi-square = 34.55 @ 0.000 level of significance; df = 4.

Computer Aided Designing has been a major technological breakthrough which has achieved a high rate of acceptance among the stakeholders of Kanchipuram cluster. A Special Software called *Techmen* is widely used in the designing process. Apart from this, design software sourced from Bangalore is also used in the cluster. The Central Silk Board also creates designs using computers and sells them in the form of Compact Discs to the registered designer members.

But, it was found that majority (61.30 per cent) of the respondents were not using computerized designs. Usage of Computerized designs is slowly picking up with the silk cooperatives. Two of them - Anna Society and Thiruvalluvar Society have installed computers for designing and computerized machines for producing the design punch cards. Majority of the respondents (42.70 per cent) in the private fold - attached to master weaver and independent category were found to use computerized designs. Usage of *adai* could also be a major reason for this trend, since design punch cards find use in *Jacquard* looms.

# Table 1

Participation in welfare scheme by type of weaver

S.No	Type of Weaver	Participation in welfare scheme		Total
		Yes	No	
1	Independent	0 (0)	5 (4.35)	5 (2.17)
2	Attached to Master Weaver	6 (5.22)	28 (24.35)	34 (14.78)
3	Cooperative Society member	90 (78.26)	0 (0)	90 (39.13)
4	Both 1&3	19 (16.52)	0 (0)	19 (8.26)
5	Both 1&2	0 (0)	82 (71.30)	82 (35.66)
	Total	115 (50)	115 (50)	230 (100)

Figures in the parenthesis denote percentages

Weaving is the largest occupation second only to agriculture. But the wages earned by these weavers are very minimal, with which they find it difficult to make the ends meet. The weavers in the cooperative fold are enjoying the social security measures of insurance and bonus. It is found from the table that all the respondents who were members of cooperative societies enjoyed the social security measures.

All the members of cooperatives were automatically enrolled for the insurance schemes that were brought out for the weavers by the government. They were the beneficiaries of schemes like

- Savings and Security Scheme,
- Bunkar Bima Yojana,
- Old Age Pension Scheme,
- Family Pension Scheme,
- ICICI Lombard Health insurance scheme etc.

For all these schemes the subscription is paid by the Cooperatives or the government and the weaver-members benefit out of the schemes.

## □□□□ 5.20

### □□□□ Marketing Channel for Weavers

S.No	Type of Weaver	Main Marketing Channel				
		Direct marketing of goods	Through Master Weavers	Local Traders	Larger Firms	Cooperatives
1	Independent	5 (2.18)	5 (3.57)	5 (3.73)	5 (2.18)	0 (0)
JL	Attached to Master Weaver	34 (14.78)	34 (24.29)	28 (20.90)	34 (14.78)	0 (0)
Q	Cooperative Society member	90 (39.13)	0 (0)	0 (0)	90 (39.13)	90 (82.57)
4	Both 1&3	19 (8.26)	19 (13.57)	19 (14.18)	19 (8.26)	19 (17.43)
5	Both 1&2	82 (35.65)	82 (58.57)	82 (61.19)	82 (35.65)	0 (0)
	Total	230 (100)	140 (60.87)	134 (58.26)	230 (100)	109 (47.39)

**Figures in the parenthesis denote percentages**

The weavers do have a little access to the market directly. Predominantly their products would reach the market through their masters either the master weavers/Cooperatives. While the master weavers have their own retail outlets, the Cooperatives sell through their showrooms, head office outlets, branches, loom world outlets, Cooptex and authorized sales agents.

The weavers adopt personal selling to the big traders like Chennai Silks, Pothys, Nalli, Kumaran, RmKV, etc. They can also supply sarees to the purchase offices of these traders located in Kanchipuram. While Chennai Silks, Pothys, Kumaran Silks and RmKV, have purchase offices in Kanchipuram, others come around for purchases from Kanchipuram regularly. Some of the master weavers in Kanchipuram are now the regular suppliers to these big shops in Chennai. The purchase officers of these shops come regularly for purchase from the master weavers in Kanchipuram. Procuring the silk sarees from them, they also do value addition by making hand embroidery, Chamki work, stone work and make the saree more attractive. They also adopt branding strategies for silk sarees and employ intensive advertising campaigns, to attract customers. With their inhouse designers these big traders, come out with innovative new designs. They come to the cluster

with the design cards and raw material, get the work done through the master weavers with whom they have contract. After completing the weaving, the design cards and other materials will have to be surrendered to their purchase office for realizing the wages. Through this mechanism they maintain the competitiveness of their products. But, it should also be noticed that in a traditional cluster like Kanchipuram, the dexterous weavers and designers are capable of grasping the techniques and replication is inevitable. But within that time, these large trading houses come up with brand new concepts shifting the attention of the market.

There are also two marketing cooperatives in Kanchipuram which enroll master weavers as their members. They did not supply any raw material for production, but on the pledge of products they grant loans to the master weavers to enable them produce further. They displayed the products of these master weavers in their outlets and once it is sold a specified amount is taken as rent for showcasing the product and the rest is either handed over to the weaver or adjusted against his advance amount.

Apart from supplying to these traders, the weavers also entertain customers who directly approached them with specific requirements. From the table 5.20, it could be observed that all the available channels for marketing were utilized by the weavers. Since the possibility of selling through outlets of Cooperative Societies is restricted to its members, only about 47.39 per cent of the respondents were able to utilize that facility. The channels of master weavers (60.87 per cent) and local traders (58.26 per cent) were open also to the members of Cooperatives i.e., the weavers were free to supply their produce to these local traders and master weavers.

**Fig.5.4**  
**Main Marketing Channel for Weavers**

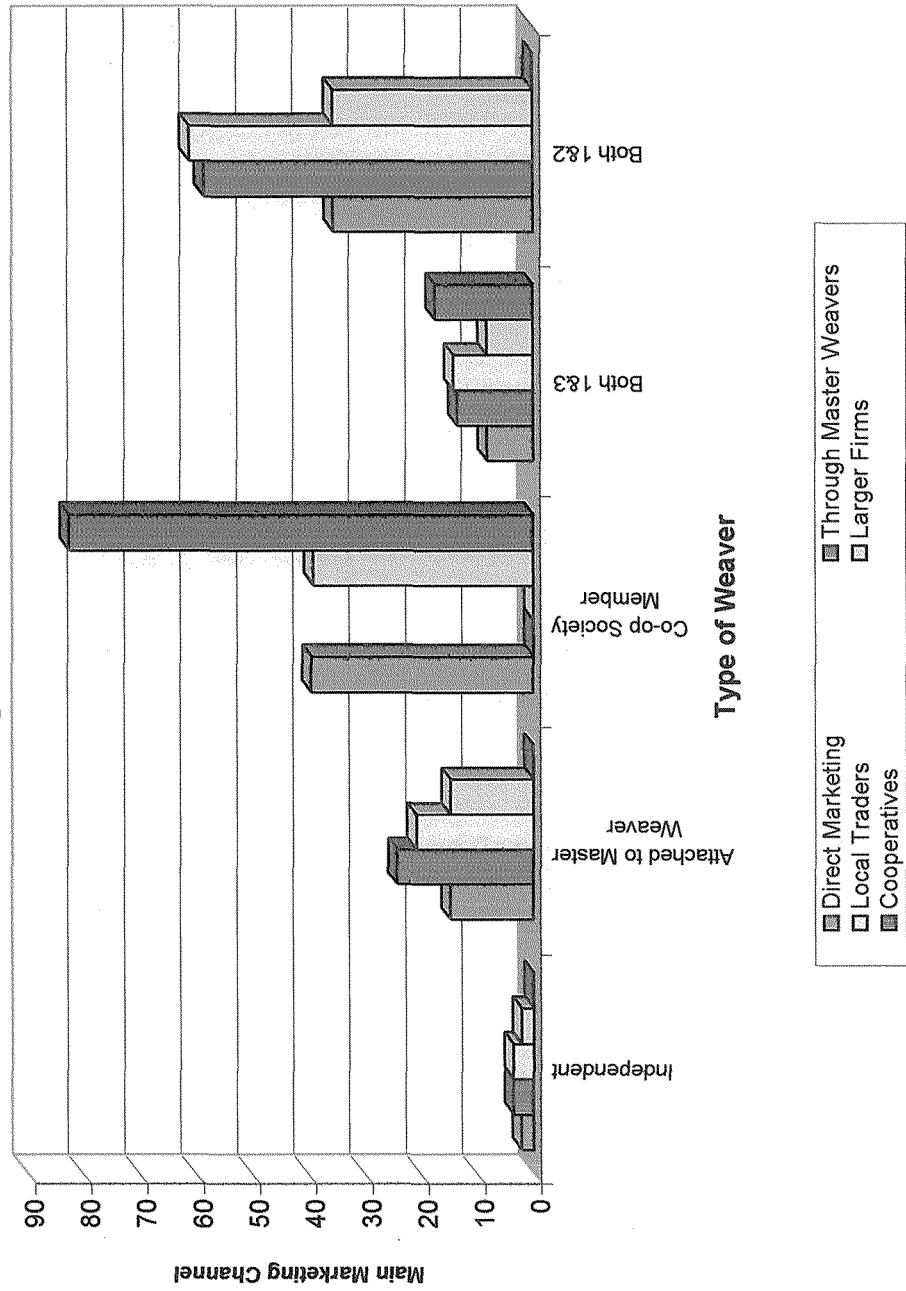


Table 5.21  
Sources of Raw materials

S.No	Type of Weaver	Sources of Raw materials				Total
		Own Purchase	Through Master weaver	Through Cooperatives/ Master Weaver	All the above	
1	Independent	5 (100)	0 (0)	0 (0)	0 (0)	5 (2.17)
2	Attached to Master Weaver	0 (0)	34 (100)	0 (0)	0 (0)	34 (14.78)
3	Cooperative Society member	0 (0)	0 (0)	90 (52.33)	0 (0)	90 (39.13)
4	Both 1&3	0 (0)	0 (0)	0 (0)	19 (100)	19 (8.26)
5	Both 1&2	0 (0)	0 (0)	82 (47.67)	0 (0)	82 (35.66)
	<b>Total</b>	<b>5 (2.17)</b>	<b>34 (14.78)</b>	<b>172 (74.78)</b>	<b>19 (8.26)</b>	<b>230 (100)</b>

Figures in the parenthesis denote percentages

The silk sarees weaving requires two important raw materials - silk yarn and zari. Though there are various retail traders who supply these raw materials, it is bulk purchases that rule the roost. In the case of Cooperatives, the yarn procurement is through TANSILK, the federation of weaver cooperatives and zari procurement is through Tamilnadu Zari Limited (TZL). The yarn from reelers is auctioned at Anna Silk Exchange (after testing the yarn at the Silk Conditioning and Testing House), in which the representatives of TANSILK participate and procure the yarn. This yarn is stocked at TANSILK from where the Cooperative Societies procure the required quantity.

In the case of zari, it is the Tamilnadu Zari Limited (TZL), a government company, created with a view to supply quality zari, in right quantities and right price, which supplies the zari required by the Cooperatives. Though TZL produces zari of its own, it is unable fulfill the requirements of the Cooperatives, hence it also

procures zari from the manufacturers in Surat, which in turn is supplied to the cooperatives. For regulating the price of zari, a Centralised Purchase Committee (CPC), has been constituted by the Directorate of Handlooms, Chennai, which fixes the price of zari every month based on the sealed tenders obtained from manufacturers in Surat and sellers in Tamilnadu.

Private merchants procured the required yarn from Karnataka Silk Marketing Board, and zari from Surat traders/manufacturers and local dealers. Unlike the case of Cooperatives, there is no centralized procurement in the case of private manufacturers.

Normally it is the practice that except the one's who weave independently, others are provided with raw materials either by their master weavers or Cooperatives. About three-fourth of the weaver respondents obtained their raw materials either from Cooperatives or master weavers (vide table 5.21). Only about 2.17 per cent of the respondents were making their own purchases since they were independent weavers. A little less than one tenth of the respondents procured raw materials through all the sources.

Table 5.22  
**Sourcing of Production Equipment & Repairing (Looms & Accessories)**

S.No	Type of Weaver	Source of Production Equipment (Looms & Accessories)	Source of Repairing the Equipment (Looms & Accessories)
		Local	Local
1	Independent	5 (2.17)	5 (2.17)
2	Attached to Master Weaver	34 (14.78)	34 (14.78)
3	Cooperative Society member	90 (39.13)	90 (39.13)
4	Both 1&3	19 (8.26)	19 (8.26)
5	Both 1&2	82 (35.66)	82 (35.66)
	<b>Total</b>	<b>230 (100)</b>	<b>230 (100)</b>

**"figures in the parenthesis denote percentages**

There is a well developed local source for production equipments (weaving appliances) in the cluster. Also the repair services for the looms were available locally. Some of the parts in loom like Jacquard boxes and design punch cards were sourced from Madurai. In such cases, the local traders helped to source the equipments and supplied them. Cooperatives had their own repairing units and technicians who shall help the weavers in keeping the looms fit for production. Moreover the Cooperative weavers were granted special benefits under the weaving appliances procurement/repair schemes, under which arrangements are made in bulk and the benefits are passed on to the weavers. There is no such organized mechanisms/support for the private producers.

Apart from the supply of equipments, these sources also supplied technical information, maintenance tips, latest equipments available (though much of innovation is not available), repair and support services, etc. Though the technical institutions like Central Silk Board (CSB) and Weavers Service Centre (WSC) were present in the cluster, they were rarely approached by the cluster participants for technical advice, guidance and support. Though the weavers were trained in these institutions on new technologies, the rate of adoption was much low, due to unwillingness, fear of risk/failure, traditional system and lack of financial capabilities.



Table 5.23

**Diversification of Products**

S.No	Type of Weaver	Diversification of Products		Total
		Yes	No	
1	Independent	2 (1.10)	3 (6.25)	5 (2.17)
2	Attached to Master Weaver	29 (15.93)	5 (10.42)	34 (14.78)
3	Cooperative Society member	53 (29.12)	37 (77.08)	90 (39.13)
4	Both 1&3	16 (8.79)	3 (6.25)	19 (8.26)
5	Both 1&2	82 (45.04)	0 (0)	82 (35.66)
	Total	182 (79.13)	48 (20.87)	230 (100)

Figures in the parenthesis denote percentages

Product diversification is the most essential part to keep away the decline from a product. In the case of goods for mass consumption like that of silk sarees, product diversification becomes very important to attract customers and to promote business. Moreover, silk sarees being goods of luxury, need to have some special features to make it attractive to the customers. It is found from the table that majority (79.13 per cent) of the weavers diversified their production in terms of changing the colour combinations, designs, patterns, variety, etc., as per the trends in market and based on the inputs given to them by their respective masters (either the master weaver or the Cooperative Society). But still there were a few respondents who produced only traditional varieties and did not diversify, due to the traditional attitude and attachment towards production of a selected variety, lack of knowledge to make product modifications, lack of funds to make the necessary changes, non-availability of technical support, non-availability of technical knowledge/labour, etc. About 20.87 per cent of the respondents did not attempt any product diversification.

Table 5,24  
Support for Diversification of Products

S.No	Type of Weaver	Support for Diversification of Products						Total
		Skilled Employees	Cooperatives	Other Weavers	Sub-contracting of large manufacturers	Local Technical/ R&D institutions	Not Applicable	
1	Independent	0 (0)	0 (0)	1 (8.33)	1 (3.33)	0 (0)	3 (6.25)	5 (2.17)
□	Attached to Master Weaver	0 (0)	23 (18.70)	0 (0)	6 (2.0)	0 (0)	5 (10.42)	34 (14.78)
<i>KJ</i>	Cooperative Society member	0 (0)	53 (43.09)	0 (0)	0 (0)	0 (□)	37 (77.08)	90 (39.13)
4	Both 1&3	0 (0)	0 (0)	0 (0)	16 (53.33)	0 (0)	3 (6.25)	— (8.26)
5	Both 1&2	7 (100)	47 (38.21)	11 (91.67)	7 (23.33)	10 (100)	— (0)	82 (35.66)
		7 (3.04)	123 (53.48)	12 (5.22)	30 (13.04)	10 (4.35)	48 (20.87)	230 (100)

Figures in the parenthesis denote percentages

Diversification of products is a challenging task even in the case of corporate companies. Without product diversification it is not possible for any business to survive in the market. As Philip Kotler says, “You have to run fast to stay in the same place”, it is quintessential to keep altering the product varieties to attract and retain customers. The Kanchipuram silk sarees industry is no exception to this. The novelty in design, innovative patterns and attractive colour combinations are the eye catchers for the products. But bringing such diversification calls for upgradation of processes, skills and also calls for increase in investment. Support is required from various fronts to make the product diversification possible.

Majority of the respondents (53.48 per cent) drew support from cooperatives for product diversification, followed by sub-contracting large manufacturers (13.04 per cent) like RmKV, Pothys, Chennai Silks, etc (vide table 5.25). While a little less than five percent of the respondents took the support of technical institutions like CSB and WSC, about 5.22 percent of the respondents drew support from fellow weavers.

Table 5.25

## Nature of Support for Diversification

S.No	Type of Weaver	Nature of Support for Diversification					Total
		Supply of Designs	Advice on equipment and Processes	All the above	Only Design & Materials	Not Applicable	
1	Independent	1 (7.14)	1 (6.25)	0 (0)	0 (0)	3 (6.25)	5 (2.17)
2	Attached to Master Weaver	0 (0)	0 (0)	0 (0)	29 (29.29)	5 (10.42)	34 (14.78)
3	Cooperative Society member	0 (0)	0 (0)	53 (100.0)	0 (0)	37 (77.08)	90 (39.13)
4	Both 1&3	0 (0)	0 (0)	0 (0)	16 (16.16)	3 (6.25)	19 (8.26)
5	Both 1&2	13 (92.86)	15 (93.75)	0 (0)	54 (54.55)	0 (0)	82 (35.66)
	<b>Total</b>	<b>14 (6.09)</b>	<b>16 (6.96)</b>	<b>53 (23.04)</b>	<b>99 (43.04)</b>	<b>48 (20.87)</b>	<b>230 (100)</b>

Figures in the parenthesis denote percentages

Though there are different sources from which support for diversification arrives, the nature of support may range from mere provision of information to supply of materials and technical support. While the cooperatives provide complete support for product diversification from provision of design to technical support, the private master weavers restrict themselves only to a few areas like provision of design.

From the above table it could be observed that majority of the respondents (43.04 per cent) have received support in the form of supply of design and materials required for diversification followed by 23.04 per cent of the respondents who received complete support for product diversification from Cooperatives in which they are enrolled as members. About 6.96 per cent of the respondents have received advice on equipments to be used and processes to be adopted.

The cluster members predominantly perceived introduction of new designs/colour patterns as product diversification. Product and process innovation are yet to be realized as the important components of diversification.

Table 5.26  
Sources of Financing for Weavers

S.No	Amount	Sources of Financing					Total*
		Own sources	Cooperatives	Master Weavers	Money lenders	Micro finance	
1	Less than 1000	7 (16.28)	0 (0)	0 (0)	0 (0)	21 (44.68)	28 (12.17)
2	1001-5000	33 (76.74)	28 (24.35)	38 (43.18)	12 (26.67)	26 (55.32)	137 (59.57)
3	5001-9000	3 (6.98)	62 (53.91)	41 (46.59)	17 (37.78)	0 (0)	123 (53.47)
4	9001-13000	0 (0)	24 (20.87)	9 (10.21)	11 (24.44)	0 (0)	44 (19.13)
C	13001 and above	0 (0)	1 (0.87)	0 (0)	5 (11.11)	0 (0)	6 (2.61)
	Total*	43 (18.70)	115 (50)	88 (38.26)	45 (19.57)	47 (20.43)	338

Note: Figures indicated in the parenthesis denote percentages  
percentages in total column pertain to total no. of weaver respondents (n=23G)

Weaver households often live in a debt cycle with the dwindling number of orders and resultant reduced earnings. Even for earning a wage of Rs.750/- to Rs.1000/- at least two to three people may have to work on a loom for more than a fortnight. The income per capita is miniscule when compared with the prevailing cost of living. Hence, borrowing is quite common among weaver households. The sources of financing range from informal sources like friends/relatives, money lenders to Cooperatives, master weavers and Micro Finance Institutions (MFIs).

Formal sources of financing like banks have almost closed their doors to weavers. Recently the cooperative banks have issued notices to the weavers on their property pledged with the banks, worth Rs.700 crores, for the default in repayment of loans. In such circumstances, for the past five years, the weavers had to resort only to other sources of finance for their consumption and production credit requirements. The above table portrays the sources of finance available for the weavers. It is found that all the members of Weaver Cooperative Societies (50 percent) have availed some loan from their Cooperatives, out of which a majority (53.91 per cent) have availed a sum between Rs.5001-9000/-. This is followed by the master weavers (38.26 per cent) who had been the second major source of credit. Nearly an equal number (one-fifth) of the respondents were found to have borrowed from money lenders and MFIs, which denotes that micro finance is slowly gaining its dominance over the usurious money lenders, which is a good trend. Personal sources were the main support for about 18.70 per cent of the respondents for their emergent credit needs which was predominantly less than Rs.500Q/- for majority (76.74 per cent) of this category.

Table 5.27

**Number of looms owned by Retailers/Masterweavers**

S.No.	No. of looms operated	Total
1	Up to 30 looms	11 (36.67)
2	31-50 looms	13 (43.33)
3	51-100 looms	3 (10)
4	101 and above	3 (10)
	<b>Total</b>	<b>30 (100)</b>

Figures in the parentheses indicate percentages

In the Kanchipuram Silk Cluster, almost all the retailers were also master weavers i.e., they either owned some looms, in which they employed weavers, or a number of looms worked for the job orders given by them. The weaver was given a wage as compensation for his services. Though the production facility (loom) was owned by the master weaver, it was installed in the weaver's household to facilitate production. This decentralized method of production, helped in reducing the capital cost of providing a big infrastructure. Moreover, the relationship is also based on orders. Once the order is over, the master weaver has the choice to place further orders or may decide the other way.

Majority of the retailers/masterweavers (43.33 per cent) owned between 31-50 looms followed by those who owned only up to 30 looms (36.67 per cent) [vide table 5.27]. With the declining market for silk sarees, the master weaver/retailers were unable to maintain all their looms active. Only about ten percent of the respondents have reported to have more than 100 looms in operation.

**Table 5.28**

Age-wise classification of the retailers/masterweavers

S.No.	No. of looms operated	Age of Respondents				Total
		20 – 30 years	31-45 years	46-60 years	61 and above	
1	Up to 30 looms	2 (28.57)	3 (27.27)	6 (66.67)	0 (0)	11 (36.67)
2	31-50 looms	3 (42.86)	8 (72.73)	2 (22.22)	0 (0)	13 (43.33)
3	51-100 looms	2 (28.57)	0 (0)	1 (11.11)	0 (0)	3 (10)
4	101 and above	0 (0)	0 (0)	0 (0)	3 (100)	3 (10)
	<b>Total</b>	<b>7 (23.33)</b>	<b>11 (36.67)</b>	<b>9 (30)</b>	<b>3 (10)</b>	<b>30 (100)</b>

Figures in the parentheses indicate percentages

Among the retailers/masterweavers, majority (36.67 per cent) of the respondents were in the age group of 31 - 45 years of age. In 20 - 30 years age category the respondents have predominantly inherited their enterprise from their parents. Earlier in the joint family system large number of looms was managed by a single master-weaver / retailer, with the help of family members. Due to the changing life styles and dwindling of joint family system, the sons were given separate establishments from the overall ownership of their father leading to fragmentation in ownership. But practically the facilities owned by the members of the family are used interchangeably for economies of scale.

It could also be observed from the table that the maximum numbers of looms (101 and above) were owned by the oldest age category, which may be due to their experience in the trade and expansion of business over a period of time.

**Table 5.29**  
**Literacy Status of the retailer respondents**

S.No.	Age of the Respondents	Literacy Status				Total
		Secondary	HSC	Graduate	Post graduate	
1	Up to 30 years	0 (0)	0 (0)	3 (37.50)	4 (66.67)	7 (23.33)
2	31-45 years	3 (20)	1 (100)	5 (62.50)	2 (33.33)	11 (36.67)
3	46-60 years	9 (60)	0 (0)	0 (0)	0 (0)	9 (30)
4	61 and above	3 (20)	0 (0)	0 (0)	0 (0)	3 (10)
	Total	15 (50)	1 (3.33)	8 (26.67)	6 (20)	30 (100)

Figures in the parentheses indicate percentages

Unlike the case of weaving, in which, the technical knowledge of weaving gains priority over formal education, there is a necessity for wider market knowledge in order to succeed in retailing. Dealing with technical/administrative institutions, competitors, suppliers and customers requires business skills which can be gained through experience in the trade. While experience in the trade comes through participation in the trade, undoubtedly, formal qualification shall open better horizons for a retailer. In fact for some of their training programmes technical institutions like Central Silk Board, prefer a basic qualification from the participants.

In this study, it was found that about half of the respondents were educated upto secondary school followed by graduates (26.67 per cent). It is also encouraging to notice that a few respondents were post graduates (20 per cent). One of the respondents Mr.Arulkumar has also completed his M.Phil and was having job offers in academics. "My father has carved a niche for himself in this trade. So I felt it is my privilege to be associated with the trade", he said.

**Table 5.30**  
**Type of Products Produced**

S.No.	No. of looms operated	Type of Products produced		Total
		Silk Sarees	All the varieties	
1	Up to 30 looms	8 (50)	3 (21.43)	11 (36.67)
2	31-50 looms	6 (37.50)	7 (50)	13 (43.33)
3	51-100 looms	2 (12.50)	1 (7.14)	3 (10)
4	101 and above	0 (0)	3 (21.43)	3 (10)
	<b>Total</b>	<b>16 (53.33)</b>	<b>14 (46.67)</b>	<b>30 (100)</b>

Figures in the parentheses indicate percentages

The name *Kanchipuram* is synonymously known for its uniquely crafted silk sarees. Kanchipuram Silk commands market throughout India, and even in foreign countries like Ceylon, Burma, Malaysia, France, Italy and United States of America. Kanchipuram is famous for “Tissue” sarees (silk and lace interwoven) produced in different sizes ranging from 24 inches to 52 inches in width and from 18 feet to 30 feet in length with attractive borders and

- variegated designs and colours. Major Products of the cluster are Korvai Saree, Tissue Saree, Jacquard Saree, Silk *Churidhars* and *Pavadai* (Silk Skirts).

Reflecting the trends in market, a majority of the respondents (53.33 per cent) confined their product line only to silk sarees. A little less than half of the respondents (46.67 per cent) were dealing with silk sarees as well as other products like silk skirts, churidhars, etc. While sarees dominate the stock followed by silk skirts, most of them reported that churidhars were made to order.



**Table 5.31**  
**No. of family members involved in the enterprise**

S.No.	No. of looms operated	No. of family members involved in the enterprise			Total
		1	2	3	
1	Up to 30 looms	2 (100)	8 (57.14)	1 (7.14)	11 (36.67)
2	31-50 looms	0 (0)	4 (28.57)	9 (64.28)	13~ (43.33)
3	51-100 looms	0 (0)	1 (7.14)	2 (14.29)	3 (10)
4	101 and above	0 (0)	1 (7.14)	2 (14.29)	3 (10)
	Total	2 (6.66)	14 (46.67)	14 (46.67)	30 (100)

Figures in the parentheses indicate percentages

Like weaving, retailing of silk fabrics also involves participation from family members. Being a traditional enterprise, the houses themselves were the showrooms where customers came for a purchase. Since the market was a niche and customers earlier came in search of the product, the business was carried out within the residential premises. Thus involvement of family members became inevitable. But now, the scenario has changed and showcasing the products through a separate showroom becomes essential. A fact still remains that predominantly retail selling alone happens at the showrooms, bulk buyers/business purchases happen still at the warehouse, which invariably is the residence of the master weaver/retailer.

Table 5.31 presents the details of number of family members involved in the enterprise. An equal number of the respondents (46.67 per cent) have reported that about two and three family members were involved in the enterprise. Only in about 6.66 percent of the cases it was only one family member involved in the enterprise. The looms are installed at the houses of the weavers. If the houses of weavers are scattered at various locations more members of the family shall be involved in coordinating the activities.

**Table 5.32****Sources of funding the working capital of the enterprise**

S.No.	No. of looms operated	Sources of Funding the enterprise			Total
		Personal sources	Bank loan	NBFC	
1	Up to 30 looms	7 (31.82)	1 (33.33)	3 (60)	11 (36.67)
2	31-50 looms	9 (40.91)	2 (66.67)	2 (40)	13 (43.33)
3	51-100 looms	3 (13.64)	0 (0)	0 (0)	3 (10)
4	101 and above	3 (13.64)	0 (0)	0 (0)	3 (10)
	Total	22 (73.33)	3 (10)	5 (16.67)	30 (100)

Figures in the parentheses indicate percentages

Being a traditional activity, the enterprises were predominantly inherited. A very few members enter retailing (which in many cases are spin-offs) since there were rigid entry barriers strengthened by the sociological ties. In such a scenario, it becomes important to trace the main source of working capital financing for the enterprise. It is found from the table that in the case of majority of the respondents (73.33 per cent) personal sources like family, friends and relatives, own savings, personal assets, etc., have been the major source of working capital financing for the enterprise. This is followed by the Non-Banking Financial Companies (NBFCs) which has been quoted as the second major source (16.67 per cent). Only about 10 percent of the respondents have quoted bank to be their source of working capital.

The commercial banks due to the unattractive local market conditions and increasing non performing assets in the loan portfolio are very much hesitant in lending to this trade. This has kept them away from the minds of the master weavers/retailers. (See Venn /diagram Analysis for Retailers).

The traders find their only solace in 'stock loans' offered by a few commercial banks, under which loan is issued on the basis of the finished goods inventory and established credit worthiness with the bank. Otherwise, they have to pledge their assets to the banker for loans. With the uncertainty in the market, they cannot be sure of the repayment.

**Table 5.33**  
**Marketing of goods - Channel**

S.No.	No. of looms operated	Direct marketing of goods	Large Firms
1	Up to 30 looms	11 (36.67)	11 (36.67)
2	31-50 looms	13 (43.33)	13 (43.33)
3	51-100 looms	13 (10)	3 (10)
4	101 and above	3 (10)	3 (10)
	<b>Total</b>	<b>30 (100)</b>	<b>30 (100)</b>

Figures in the parentheses indicate percentages

The above table presents the main channels of marketing for the retailers. While all the master weavers/retailers had their own retail outlets to showcase their products, the tie up with large firms is looming up as a major source of marketing. (See case study on Internationalization - An optimistic sign of possibility).

The textile retail majors of Chennai come for a regular purchase from the master weavers/retailers here. While a few like Pothys, Chennai Silks and RmKV Silks have located their local purchase office at Kanchipuram, others send their purchase team to pick-choose the best of the lot from the produce with these master weavers / retailers. Except Kumaran Silks, no other retailer seems to have a production base at the Kanchipuram cluster (though some of them claim to have such a facility). In recent periods, they have started to play a vital role, by introducing product differentiation in terms of changes in designs and colour patterns, branding and aggressive sales promotion. (See , Branding P(l)ays...case study). With their strong financial base and brand equity, they are capable of exporting these products. If the informal linkages with these textile retail majors are strengthened further it can serve as a major conduit for internationalization of the cluster.

**Table 5.34**  
**Provision of Services by the channel members**

S.No.	No. of looms operated	Provision of Design input	Provision of Market intelligence	Provision of Raw materials	Technical Assistance	Training inputs	Credit facilities
1	Up to 30 looms	11 (52.38)	11 (47.83)	3 (50)	1 (25)	1 (25)	1 (33.33)
	31-50 looms	9 (23.81)	9 (39.13)	3 (50)	3 (75)	3 (75)	2 (66.67)
3	51-100 looms	2 (9.52)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
4	101 and above	3 (14.29)	3 (13.04)	0 (0)	0 (0)	0 (0)	0 (0)
	<b>Total</b>	<b>21 (70)</b>	<b>23 (76.67)</b>	<b>6 (20)</b>	<b>4 (13.33)</b>	<b>4 (13.33)</b>	<b>3 (10)</b>

Figures in the parentheses indicate percentages

Extensive technical, market and competitive information accumulates within a cluster and members have preferred access to it. In addition, personal relationships and community ties foster trust and facilitate the flow of information. These conditions make the information more transferable (Porter 1998). The channel members like suppliers of raw materials, sub-contracting agents, customers, competitors and technical/support institutions serve as the main sources of market information/services.

The above table presents the types of services provided by the channel members. Provision of market intelligence was found to be the major service rendered by the channel members as stated by majority (76.67 per cent) of the respondents followed by provision of design inputs (70 per cent). With the geographical proximity and focus on the same market, the transfer of market intelligence happens easily in the Kanchipuram cluster. Other services provided by the channel members are provision of raw materials (20 per cent), technical assistance (13.33 per cent), training inputs (13.33 per cent) and credit facilities (10 per cent).

# செய்துள்ள கண்கணிப்பு

## கண்கணிப்புக்கான காரணிகள் மற்றும் அவற்றின் முக்கியத்துவம்

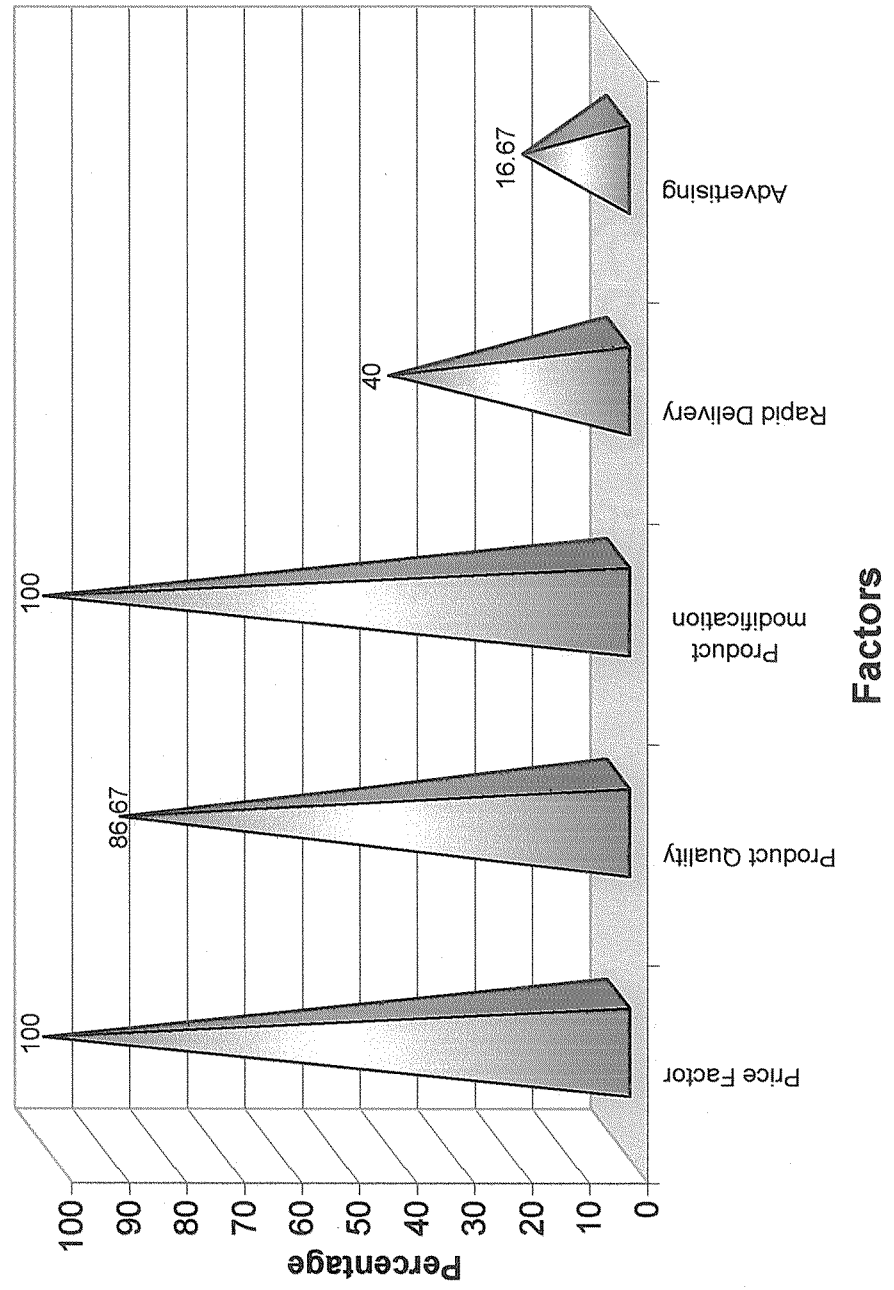
S.No.	No. of looms operated	Price Factor	Product Quality	Product modification as per customer need	Rapid Delivery	Advertising
1	Up to 30 looms	11 (36.67)	11 (42.30)	11 (36.67)	3 (25)	2 (40)
2	31-50 looms	13 (43.33)	9 (34.62)	13 (43.33)	5 (41.67)	3 (60)
3	51-100 looms	3 (10)	3 (11.54)	3 (10)	1 (8.33)	0 (0)
4	101 and above	3 (10)	3 (11.54)	3 (10)	3 (25)	0 (0)
	Total	30 (100)	26 (86.67)	30 (100)	12 (40)	5 (16.67)

Figures in the parentheses indicate percentages

The marketing mix consists of four constituents viz., Product (Customer Need), Price (Customer Cost), Place (Customer Convenience) and Promotion (Customer Information). Marketing of any product shall involve the right combination of these factors and silk sarees are no exception to this rule.

The above table presents the major factors that attract the customers towards Kanchipuram Silk fabrics, as perceived by the retailer respondents of the study. All the respondents have felt that modification/production of the product according to the tastes/needs of the customers was the chief attraction. But due to the availability of cheaper substitutes, 'price' has also loomed up as a top factor in the minds of all respondents. Thus the unique product quality of Kanchipuram silk has occupied only the second place, with 86.67 per cent of the respondents rating it to be the major factor of attraction. In spite of the fact that textile retail majors employing intensive advertising campaign in print, audio and visual media, 'advertising' is yet to be realized as an important factor for attracting customers by the cluster members. Only about 16.67 per cent of the respondents have rated advertising as an important tool for attracting customers; the main reasons being high cost of advertising and lack of immediate tangible benefits. "With an established customer base, advertising is not of much use to us", said a senior respondent retailer / master weaver.

**Fig.5.5**  
**Factors that attract customers**



□□□□□ □□□□  
**Opinion about Zari testing**

□□□□□	No. of looms operated	Opinion about Zari testing □□□□		Total
		Useful	Not useful	
1	Up to 30 looms	11 (39.29)	0 (0)	<b>11</b> <b>(36.67)</b>
2	31-50 looms	13 (46.43)	0 (0)	<b>13</b> <b>(43.33)</b>
3	51-100 looms	1 (3.57)	2 (100)	<b>3</b> □□□□
4	101 and above	3 (10.71)	0 (0)	<b>3</b> □□□□
	<b>Total</b>	<b>28</b> <b>(93.33)</b>	<b>2</b> <b>(6.67)</b>	<b>30</b> □□□□□

Figures in the parentheses indicate percentages

Use of fake zari (half fine) in the production of silk sarees is a serious problem faced by the cluster. Recently the Tamilnadu Zari Limited has introduced a zari testing technology developed by Indira Gandhi Centre for Atomic Research, Kalpakkam (See case study - Zari Testing). This facility has been kept open to the public where they can get their purchases tested at nominal charges. Though there was a favourable response from the end of customers, there has also been an initial resistance from the traders. As a part of the interview the responses were elicited from the retailers / master weavers about the zari testing.

From the above table it is found that a thumping majority (93.33 per cent) of the respondents exhibited a favourable attitude and stated that the facility was extremely useful and a step towards saving the sellers of original goods. About 6.67 per cent of the respondents were not very much convinced with the present method of X-ray Fluorescence testing.

“The standards are fixed by the Cooperatives themselves, who are also into this business. They are not neutral agencies. Our standards are much better than that of Cooperatives, which our customers know. Moreover there are also some reported limitations of the technology being used. So we do not rely on this technology”, said a veteran master weaver/retailer.

**Awareness about Apparel Park initiative**

S.No.	No. of looms operated	Awareness about Apparel Park Initiative		Total
		Yes	No	
1	Up to 30 looms	0 (0)	11 (42.31)	<b>11</b> <b>(36.67)</b>
2	31-50 looms	0 (0)	13 (50)	<b>(43.33)</b>
3	51-100 looms	<b>1</b> (3.57)	2 (7.69)	<b>3</b> <b>(10)</b>
4	101 and above	3 (10.71)	0 (0)	<b>3</b> (10)
	Total	<b>4</b> <b>(13.33)</b>	<b>26</b> <b>(86.67)</b>	<b>30</b> <b>(100)</b>

Figures in the parentheses indicate percentages

Kanchipuram cluster has been benefited by the various schemes of the government like - Initiation of Cooperatives, Intensive Handloom Training Project, Market Development Assistance, Textile Centre Infrastructure Development Scheme, Scheme for Integrated Textile Parks, etc. (See the section - Kanchipuram through Ages in Chapter 3).

The Apparel Park for Exports Scheme (APES) is a centrally sponsored scheme intended to impart focused thrust to setting up of Apparel Manufacturing Units of international standards at potential growth centres and to give fillip to exports in this sector so as to achieve the target of US \$ 25 billion as envisaged in the National Textile Policy 2000. The highlights of this scheme being demarcation of a land area of 150 - 250 acres size, each unit with atleast 200 sewing machines capacity and employment potential of 20,000. The location for this textile park has been chosen at Irungattukkottai, which is located only about 40 kilometres away from the cluster.

In the study it was found that only about 13.33 per cent of the respondents were aware of apparel park initiative (vide table 5.37). Even those who knew were quite skeptical about the benefits of such an opportunity. Due to lack of awareness and guidance such prospective opportunities are missed out by the cluster stakeholders. While in other clusters like leather, the industry association (Indian Shoe Federation) and government agencies (Council for Leather Exports) work hand-in-hand to explore market opportunities, such a synergistic approach is absent in the cluster. The government machinery and private players are operating as islands of autonomy. Lack of synergetic action is one of the main weaknesses of this cluster.



□□□□□ 5.38

Awareness about		Geographical Indication		
S.No.	No. of looms operated	Awareness about Geographical Indication		Total
		Yes	No	
1	Up to 30 looms	10 (41.67)	1 (16.67)	<b>11</b> <b>(36.67)</b>
2	31-50 looms	10 (41.67)	3 (50)	<b>13</b> <b>(43.33)</b>
3	51-100 looms	1 (4.16)	2 (33.33)	<b>3</b> <b>(10)</b>
4	101 and above	3 (12.50)	0 (0)	<b>3</b> <b>(10)</b>
	Total	<b>24</b> <b>(80)</b>	<b>6</b> <b>(20)</b>	<b>30</b> <b>(100)</b>

Figures in the parentheses indicate percentages

Geographical Indication (GI) is a legal protection given under Geographical Indications of Goods (Registration and Protection) Act, 1999. This Act seeks to provide for the registration and better protection of geographical indications relating to goods in India. A geographical indication identifies that the particular product originates from a definite geographical territory. It is used to identify agricultural, natural or manufactured goods. The manufactured goods should be produced or processed or prepared in that territory and should have a special quality or reputation or other characteristics.

Kanchipuram silk has recently obtained registration in the GI Registry. This registration ensures protection to the Silk sarees produced in Kanchipuram. Any act of violation, in terms of selling sarees of other origins as 'Kanchipuram Silk Saree' shall invite legal proceedings under section 42 (2) of the GI Goods (Registration and Protection) Act, 1999, with a liable 'punishment of imprisonment for a term which may extend up to 3 years with fine. Such an offence is also punishable under Sec.420 of the Indian Penal Code.

In the Kanchipuram silk cluster, it was found that a majority (80 percent) of the respondents were aware about GI. But GI being in its initial stages, even the producer/merchant community is yet to become fully aware of the concept. The Kanchipuram Silk Saree Small Producers Association is planning to sensitize the production/merchant community in this regard. (See case study on GI & Silk Mark).

**Table 5.39**  
**Diversification of Products**

S.No.	No. of looms operated	Diversification of Products		Total
		Yes	No	
1	Up to 30 looms	6 (28.57)	5 (55.56)	11 (36.67)
2	31-50 looms	11 (52.38)	2 (22.22)	13 (43.33)
3	51-100 looms	1 (4.76)	2 (22.22)	3 (10)
4	101 and above	3 (14.29)	0 (0)	3 (10)
	<b>Total</b>	<b>21 (70)</b>	<b>9 (30)</b>	<b>30 (100)</b>

Figures in the parentheses indicate percentages

Product diversification is an effective strategy for survival in the case of a market characterized by homogeneous product, large number of sellers and availability of cheaper substitutes. In the case of goods for mass consumption like that of silk sarees, product diversification becomes very important to attract customers and to promote business. Moreover, silk sarees being a good of luxury, need to have some special feature to make it attractive to the customers.

Majority (70 per cent) of the master weaver/ retailer respondents diversified their production in terms of changing the colour combinations, designs, patterns, variety, etc. As per the trends in the market they diversified their collection. About 30 per cent of the respondents preferred to stock the traditional varieties and did not diversify, due to the demand for traditional varieties, lack of funds for diversification, non-availability of technical support, non-availability of technical knowledge/labour, fear of risk, etc.

### Support for Diversification of Products

S.No.	No. of looms operated	Support For Diversification of Products				Total
		Skilled Employees	Other Master weavers	Sub-contracting of large manufacturers	Local Technical/ R&D institutions	
1	Up to 30 looms	2 (40)	2 (50)	5 (83.33)	2 (13.33)	11 (36.67)
2	31-50 looms	2 (40)	0 (0)	1 (16.67)	10 (66.67)	13 (43.33)
3	51-100 looms	0 (0)	2 (50)	0 (0)	1 (6.67)	3 (10)
4	101 and above	1 (20)	0 (0)	0 (0)	2 (13.33)	(10)
	<b>Total</b>	<b>5 (16.67)</b>	<b>4 (13.33)</b>	<b>6 (20)</b>	<b>15 (50)</b>	<b>30 (100)</b>

Figures in the parentheses indicate percentages

While diversification is viewed as a challenging task even by multinationals and corporates, it is much more difficult for these traditional Micro and Small Enterprises. But product diversification is quite essential for survival. The novelty in design, innovative patterns and attractive colour combinations are the eye catchers for the silk fabrics. Product diversification depends upon various factors like upgradation of processes, skills and also an increased investment. Support from various fronts alone shall make it possible.

About half of the respondents (50 per cent) (vide table 5.40) depended upon the local technical and R&D institutions like Central Silk Board and Weavers Service Centre for product diversification, followed by sub-contracting large textile houses (20 per cent) like RmKV, Pothys, Chennai Silks, etc. While about 16.67 per cent of the respondents drew support from skilled employees and about 13.33 per cent of the respondents were supported by fellow master weavers / retailers in their diversification endeavours.

**Table 5.41**  
**Nature of the Support for Diversification**

S.No.	No. of looms operated	Nature of the Support for Diversification			Total
		Supply of Designs	Advice on equipment and Processes	Training	
1	Up to 30 looms	6 (60)	3 (33.34)	2 (18.18)	11 (36.67)
2	31-50 looms	3 (30)	2 (22.22)	8 (72.73)	13 (43.33)
3	51-100 looms	0 (0)	2 (22.22)	1 (9.09)	3 (10)
4	101 and above	1 (10)	2 (22.22)	0 (0)	3 (10)
	<b>Total</b>	<b>10 (33.33)</b>	<b>9 (30)</b>	<b>11 (36.67)</b>	<b>30 (100)</b>

Figures in the parentheses indicate percentages

Normally in such a traditional cluster like Kanchipuram, the nature of support for diversification may range from mere provision of information to supply of materials and technical support. While the cooperatives have a network of their own to support their efforts of diversification, the private master weavers have only restricted conduits.

Majority of the respondents (36.67 per cent) received support in the form of training required for diversification followed by supply of designs (33.33 per cent) [vide table 5.41].

Diversification meant introduction of new designs and colour patterns to the cluster members. Product and process innovations were yet to be realized as the important components of diversification.

**Table 5.42****Existence of Product/Process Specialization**

S.No.	No. of looms operated	Existence of Product Specialization		Total	Existence of Process Specialization		Total
		Yes	No		Yes	No	
1	Up to 30 looms	9 (34.62)	2 (50)	11 (36.67)	11 (45.83)	0 (0)	11 (36.67)
2	31-50 looms	13 (50)	0 (0)	13 (43.33)	9 (37.50)	4 (66.67)	13 (43.33)
3	51-100 looms	1 (3.85)	2 (50)	3 (10)	1 (4.17)	2 (33.33)	3 (10)
4	101 and above	3 (11.53)	0 (0)	3 (10)	3 (12.50)	0 (0)	3 (10)
	<b>Total</b>	<b>26 (86.67)</b>	<b>4 (13.33)</b>	<b>30 (100)</b>	<b>24 (80)</b>	<b>6 (20)</b>	<b>30 (100)</b>

**Figures in the parentheses indicate percentages**

Product / Process specialization pertain to adoption of special techniques in production of special varieties of products and carving a special niche for such a line of products. Kanchipuram silk by itself is a product of speciality with an array of special features (See Chapter 1 - section Kanchipuram Silk: What makes it unique?) attracts customers across the globe. While a few specialized in *korvai* (term used to refer 'interlocking of border and body' of a saree) sarees, some were specialists in wedding collections, others in silk skirts and a few generalists.

From table 5.42 it is observed that great majority of the respondents specialized both in products (86.67 per cent) and processes (80 percent), since both of them were inseparable elements. When a special variety of product has to be created the specialization of process follows. But innovations in production technology or processes are very rare. Except for computerization of designing, much of innovation has not crept in the cluster, in recent periods. A new dyeing technology has recently been introduced by CSB which is yet to get popularized.

**Table 5.43**  
**Acquisition of the basic training**

S.No.	No. of looms operated	Acquisition of the basic training		Total
		On the job	Family	
1	Up to 30 looms	3 (33.33)	8 (38.10)	11 (36.67)
2	31-50 looms	4 (44.45)	9 (42.86)	13 (43.33)
3	51-100 looms	0 (0)	3 (14.28)	3 (10)
4	101 and above	2 (22.22)	1 (4.76)	3 (10)
	<b>Total</b>	<b>9 (30)</b>	<b>21 (70)</b>	<b>30 (100)</b>

Figures in the parentheses indicate percentages

Not only the art of weaving but management of the looms and marketing also have to be learnt on the job. Seldom is any formal course in vogue to train people in such skills. While the child in a weaver's house plays with the weaving implements, the child of a master weaver / retailer learns by observation the nuances of choosing the right stuff for marketing, accompanies the father to the looms and learns the management part, starts sitting in the showroom from the age of seven and becomes a full fledged master weaver/retailer at the end of its teens. Thus, by the passage of time ' through socialization and observation, knowledge is acquired as a way of life.

This fact is also reflected in the study, as shown in the table. A thumping majority of the respondents have acquired their basic training in silk fabric retailing from their family (70 per cent) and the rest (30 per cent) have begun their career as workers with master weavers / retailers and have graduated to be retailers at a later period of time.

**Table 5.44**  
**Sources of finance**

S.No.	No. of looms operated	Sources of finance				Total
		Owners' savings	Family/ Relatives	Inherited from Parents	Loans from Private Sources	
1	Up to 30 looms	1 (14.28)	3 (100)	7 (38.89)	0 (0)	11 (36.67)
2	31-50 looms	0 (0)	0 (0)	11 (61.11)	2 (100)	13 (43.33)
3	51-100 looms	3 (42.86)	0 (0)	0 (0)	0 (0)	3 (10)
4	101 and above	3 (42.86)	0 (0)	0 (0)	0 (0)	3 (10)
	<b>Total</b>	<b>7 (23.33)</b>	<b>3 (10)</b>	<b>18 (60)</b>	<b>2 (6.67)</b>	<b>30 (100)</b>

Figures in the parentheses indicate percentages

Right from the early years of history, the trade has been a domain of a few classes of the society, since the occupation commanded a special place in the social structure (See Timeline Analysis - Kanchipuram Silk through Ages in Chapter 3). This legacy is still present in the master weaver/retailer segment with the *Sourashtra* and *Mudaliyar* communities dominating the trade. Being a traditional sector, the enterprise comes across generations; the lineages dominate spin-offs/new-born. Hence, most of the present day retailers/master weavers have inherited the enterprise from their forefathers.

Aligning with the above, it could be observed from table 5.44 that majority (60 percent) of the respondents have inherited the enterprise from their parents. This was followed by the category of those who have invested their savings to initiate the enterprise (23.3 percent), which is the case of spin-offs. While family and relatives funded the enterprises of ten percent of the respondents, private financiers were their source of funding for about 6.67 percent of the enterprises.

An important feature to be observed here is that formal sources of finance like banks did not figure in any response as a prime source of funding the enterprise, due to the unfavourable attitude of the bankers towards this industry.

**External Sources of Credit**

S.No.	No. of looms operated	External Sources of Credit		Total
		Bank	Private Financiers	
1	Up to 30 looms	9 (50)	2 ■ (16.67)	11 (36.67)
2	31-50 looms	7 (38.89)	6 (50)	13 (43.33)
3	51-100 looms	0 (0)	3 (25)	3 (10)
4	101 and above	2 (11.11)	1 (8.33)	3 (10)
	<b>Total</b>	<b>18 (60)</b>	<b>12 (40)</b>	<b>30 (100)</b>

Figures in the parentheses indicate percentages

Though the handloom sector is next only to agriculture in providing employment, it gains only a step-motherly treatment from the formal financial institutions. The bankers prefer lending for other sectors to this handloom sector, due to mounting numbers of non-performing assets. If at all the retailers have to approach the bank for a loan they must be prepared with collaterals for obtaining a loan. With the increasing cost of zari and yarn the investment and working capital requirements are high in the industry. There must be a stock of at least 20 to 30 sarees per variety for a choice of one by the customer. Hence the inventory cost and carrying cost are also high. Moreover, the obsolescence of unsold sarees over a period of time and sudden changes in trends and fashion leaves the retailers with accumulated losses. So they are unable to repay the loans on time and are forced to turn to informal sources of finance which lend at usurious rates of interest.

Against this background, it is found from the table 5.45 that majority of the respondents (60 per cent) availed the financial services of the banks, but faced the problems of accumulating stock. The cash credit system was available only for cooperatives through the Central Cooperative bank, which was not available to the private retailers. But a similar system by which loans on value of stock was given for some retailers who have established their credibility with the bankers. Others resorted only to informal sources and moneylenders.



**Formal Training programmes attended**

S.No.	No. of looms operated	Formal Training programmes attended			Adoption of Technology	Total
		CSB	Others	No Formal Training		
1	Up to 30 looms	0 (0)	0 (0)	11 (45.83)	0 (0)	11 (36.67)
2	31-50 looms	4 (100)	0 (0)	9 (37.50)	2 (100)	13 (43.33)
3	51-100 looms	0 (0)	2 (100)	1 (4.17)	0 (0)	3 (10)
4	101 and above	0 (0)	0 (0)	3 (12.50)	0 (0)	3 (10)
	Total	4 (13.33)	2 (6.67)	24 (80)	2 (6.67)	30 (100)

Figures in the parentheses indicate percentages

Realizing the need for technical support to the cluster, the Ministry of Textiles, Government of India has located technical training and research institutions like Weavers Service Centre (WSC) in 1958 and the Silk • Conditioning and Testing House (Central Silk Board) (SCTH / CSB) in 1992 in the cluster. The main objective of these institutions was to serve as a conduit for transfer of technical knowledge obtained out of research in textile technology and sericulture through research, training and extension activities. While the SCTH/CSB deals with the macro issues like quality of silk yarn/zari, looms, dyeing technology and designing, the WSC aims at the micro level dissemination of knowledge in weaving, dyeing and designing. Hence CSB works closely with Government Anna Silk Exchange (ASE) that operates for the Cooperative Sector and the master weavers of the private sector. While ASE is benefited by yarn conditioning and testing services, the private master weavers/retailers are benefited through the technology training programmes of CSB.

From table 5.46 it could be observed that majority of the respondents (80 per cent) have not undergone any formal training programme and about 13.33 percent of the respondents underwent training programmes organized by CSB.

Even among those who underwent training, the adoption rate was only about 6.67 percent of the respondents. The main reasons for such a low rate of adoption were lack of financial support and procedural difficulties in obtaining the loan facilities. (See Appendix II - Case studies 2 & 8).

## Problems in Production and Marketing

Based on the pilot study in the cluster, the major problems faced by the cluster in terms of production and marketing were identified. During the field survey, the respondents in the categories of weavers, retailers/master weavers, and traders' associations/cooperatives were asked to rank the problems based on their intensity from their perception. The ranks were grouped and tabulated for the individual categories as well as for the overall sample respondents. The results are presented below:

**Table 5.47**  
**Ranking - Problems in Production**

S. No.	Problems in Production		Weavers (Cooperatives)	Weavers (Private)	Combined	Retailers	Traders Associations/ Cooperatives	Overall
1	Escalation of raw material (Zari/Yarn) cost	RMC	5	6	5	1	1	1
2	Non-availability of Labour	NAL	7	7	7	3	3	7
3	Increased use of fake zari	UFZ	6	1	6	2	8	6
4	Climatic factors	CF	8	3	8	2	5	8
5	Delay in availability of Raw materials	DRM	1	8	1	8	7	8
6	Low Wages	LW	3	2	2	7	6	2
7	Delay in Wage Payment	DWP	4	4	4	6	4	4
8	Working Capital Problems	WCP	2	2	2	7	2	2

### Problems in production

Rank	RMC	NAL	UFZ	CF	DRM	LW	DWP	WCP
1	<b>105</b> <b>(37.10)</b>	30 (10.60)	43 (15.20)	15 (5.30)	90 (31.80)	0 (0)	0 (0)	0 (0)
2	0 (0)	0 (0)	10 (3.53)	12 (4.24)	28 (9.89)	<b>101</b> <b>(35.69)</b>	0 (0)	<b>212</b> <b>(74.92)</b>
3	30 (10.60)	99 (34.98)	49 (17.32)	0 (0)	90 (31.80)	0 (0)	0 (0)	0 (0)
4	0 (0)	0 (0)	11 (3.90)	8 (2.83)	0 (0)	2 (0.71)	<b>216</b> <b>(76.33)</b>	45 (15.90)
5	90 (31.80)	0 (0)	28 (9.89)	36' (12.72)	2 (0.71)	5 (1.77)	40 (14.13)	4 (1.41)
6	43 (15.20)	21 (7.42)	122 <b>(43.10)</b>	22 (7.77)	24 (8.48)	32 (11.31)	19 (6.71)	0 (0)
7	15 (5.30)	<b>133</b> (47)	20 (7.07)	19 (6.71)	27 (9.54)	13 (4.59)	5 (1.77)	19 (6.71)
8	0 (0)	0 (0)	34 (12.01)	<b>122</b> <b>(43.11)</b>	<b>112</b> <b>(39.58)</b>	40 (14.13)	3 (1.06)	3 (1.06)
<b>Total</b>	<b>283</b> <b>(100)</b>	<b>283</b> <b>(100)</b>	<b>283</b> <b>(100)</b>	<b>283</b> <b>(100)</b>	<b>283</b> <b>(100)</b>	<b>283</b> <b>(100)</b>	<b>283</b> <b>(100)</b>	<b>283</b> <b>(100)</b>

The problems in production are multifarious ranging from the escalating cost of raw materials to the problems in mobilizing the working capital.

The main raw materials for production of silk saree are silk yarn and zari. Zari because of its gold content is costlier. With the inflating prices of gold in the bullion market, no doubt the price of zari also escalates. This at times reaches the level, which are unimaginable for the weavers and master weavers. The irony is that though the zari cost keeps increasing, the price of the end product i.e, the silk saree cannot be escalated accordingly. The price has to be competitive to survive in the market. This situation puts pressure on the producers and hence has been ranked as the topmost problem (37.10 per cent) in the perception of the cluster members. Due to the escalating cost of zari, there is also an increasing use of fake zari in the silk sarees, which affects the producers of original goods. The recent initiative of zari testing facility is sure to bring down the usage of fake zari, provided the concept is popularized among the consumers.

It is important to note that all the respondents from Traders Association/Cooperatives and a majority (66.67 per cent) of the retailers have ranked increasing use of fake zari as the third major problem facing the cluster in terms of production, since this affects the quality image of the cluster.

The principal production system of the cluster i.e., the weavers, who create such fabulous pieces of silk fabrics, are in dark. In most cases they are at the mercy of their bosses i.e., the master weavers. Slogging in the loom for days together and shuttling the weave, the weaver has to get satisfied with a small sum as wages for the weave. This problem of low wages looms up as the second major problem in the minds of the cluster members.

Adding to the woes of the weavers is the problem of 'delayed payment of wages'. While the administrative delays in release of funds and lack of finance with the Cooperatives causes delay in payment of wages to their weaver-members, the private master weavers who are affected by the slump in sales also cause delay in payment of wages. This results in strained business relations, non-availability of labourers and finally causing problems in the production process. Also the delay in payment of wages results in the switch over of weavers to other unskilled occupations in the nearby industries causes the problem of non-availability of labour.

The problem of mobilizing working capital for the production cycle is also a major issue facing the silk fabric producers of this cluster, since they had to struggle even to make ends meet. Having lost the confidence of bankers, the producers have to choose only between the devil and the deep blue sea. They borrow at usurious rates from moneylenders or struggle to mobilize money from personal sources to meet their working capital requirements.

While the problem of delayed supply of raw material has been ranked the top-most (78.26 per cent) by the weavers of Cooperatives category and low wages seems to be the second largest problem for private weavers (82.61 per cent).

**Ranking of Problems in Marketing**

S. No.	Problems in Marketing		Weavers (Cooperatives)	Weavers (Private)	Combined (Weavers)	Retailers	Traders Associations/ Cooperatives	Overall
-1	Increasing cost of sarees due to rise in cost of Raw materials	RMC	1	1	1	1	1	1
2	Increased use of fake zari	UFZ	2	2	2	1	2	2
3	Brokers / Middlemen	B/M	5	5	5	3	5	5
4	Unfair Trade Practices	UFTP	3	3	3	5	3	3
5	Cheaper Substitutes	CS	6	6	6	4	4	6
6	Lack of Advertising	LAD	4	4	4	7	5	4
7	Limitations in Production and Diversification	LPD	7	7	7	5	6	7

**Table 5.50**  
**Problems in marketing**

Rank	RMC	UFZ	B/M	UFTP	CS	LAD	LPD
1	<b>210</b> <b>(74.21)</b>	73 (25.80)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
0	69 (24.38)	<b>204</b> <b>(72.08)</b>	10 (3.53)	0 (0)	0 (0)	0 (0)	0 (0)
8	4 (1.41)	0 (0)	72 (25.44)	<b>168</b> <b>(59.36)</b>	20 (7.07)	0 (0)	0 (0)
A	0 (0)	0 (0)	0 (0)	49 (17.31)	49 (17.31)	<b>161</b> <b>(56.89)</b>	13 (4.59)
0	0 (0)	6 (2.12)	<b>201</b> <b>(71.03)</b>	61 (21.56)	19 (6.71)	14 (4.95)	13 (4.59)
6	0 (0)	0 (0)	0 (0)	0 (0)	154 <b>(54.42)</b>	23 (8.12)	106 (37.46)
7	0 (0)	0 (0)	0 (0)	5 (1.77)	41 (14.50)	85 (30.04)	<b>151</b> <b>(53.36)</b>
<b>Total</b>	<b>283</b> <b>(100)</b>	<b>283</b> <b>(100)</b>	<b>283</b> <b>(100)</b>	<b>283</b> <b>(100)</b>	<b>283</b> <b>(100)</b>	<b>283</b> <b>(100)</b>	<b>283</b> <b>(100)</b>

Not only the finished goods but also the problems in production are tagged along with those goods to the selling end. In the case of problems

faced in marketing, the increasing prices of finished goods due to the escalating cost of raw materials looms up as the top most problem in the minds of majority (74.21 per cent) of the respondents.

Increasing use of fake zari, an effect of the escalating cost of raw materials, which affects the quality image of the cluster products, has been ranked as the second major problem by 72.08 per cent of the respondents. Unfair trade practices like selling the sarees of other origins/fake goods/power loom products in the brand name of 'Kanchipuram' has been ranked as the third major problem by 59.36 per cent of the respondents. Kanchipuram silk has recently obtained registration under the 'Geographical Indications' registry. Effective propagation of the provisions among the cluster members and proper implementation of the same by authorities can help solve this problem.

Lack of advertising has been ranked as the fourth major problem by about 56.89 per cent of the respondents. Due to the high costs of advertising and lack of immediate tangible benefits many of the cluster members do not take up the advertising strategy seriously. Since the products of the cluster are highly homogeneous, advertising shall be an important strategy of sales promotion.

With the aggressive advertising campaign by the Chennai based retail majors like Pothys, RmKV, etc., slowly the market has started shifting away from the cluster. Hence advertising is being perceived as one of the major problems by the cluster members.

The problem of brokers and middlemen who mislead the buyers, has been ranked as the fifth major problem by 71.03 per cent of the respondents. Availability of cheaper substitutes from the competitor clusters like Arni, Kumbakonam and Dharmavaram, has been perceived as the sixth major problem by 54.42 per cent of the respondents. But, the same problem has been ranked as the fourth major problem by the retailers/master weavers, cooperatives and traders association respondents.

Lack of product diversification has obtained only the last rank in the minds of the respondents with a majority (53.36 per cent) of them assigning it the last rank. But this is a major area which hinders the expansion of the

cluster's market in the export arena. Also this is evident from the market of the cluster, which is confined to the South Indian states of Tamilnadu, Andhra Pradesh and Karnataka. Lack of advertising and sales promotion techniques are other major areas of concern for a mass consumption product like Silk sarees. Special attention has to be paid to these areas to fare well against the competitors in the market.

To sum up, from this section on profile of the members of principal production system it could be observed that the weavers of the cluster are observed to work predominantly under two major systems viz., Cooperatives or master weavers. A very few are working outside both the systems. The younger generation weavers are conspicuous by their absence, with the scenario dominated by middle and old aged weavers. This indicates the danger to the survival of weaving art in the forthcoming years. While the Cooperatives provide a complete support in terms of production and marketing, the private master weavers provide limited support to the weavers in terms of production and marketing. The wages earned by weavers of Cooperatives are higher per piece of weave due to the welfare orientation of the Cooperatives. Product diversification and technological upgradation are very rare phenomena. Though formal training is given by agencies like Weavers Service Centre to the weavers and Central Silk Board to the master weavers, the technology adoption rate is found to be very low. The Chennai-based textile retail majors like Pothys, RmKV, Chennai Silks, etc., are emerging as an important channel of sales to the weavers. Informal sources seem to dominate the major source of finance for weavers and master weavers. Among weavers, micro finance is emerging as a substitute to the usurious moneylenders.

In the next section, the statistical analysis of the data has been taken up to gain a better understanding about the behaviour of variables under study.

## Section II

The profiling of the weavers and master weavers, the main constituents of the principal production system has given a comprehensive understanding of their socio-economic status, their production and market linkages. Though the weavers create such fabulous pieces of silk fabrics through their dexterous efforts, they are not the major beneficiaries of the process. In most cases they are at the mercy of their bosses i.e., the master weavers. Slogging in the loom for days together and shuttling the weave, the weaver has to get satisfied with a small sum as wages for the weave. Adding fury to the fire is the problem of 'delayed payment of wages'. While the administrative delays in release of funds and lack of finance with the Cooperatives causes delay in payment of wages to their weaver-members, the private master weavers who are affected by the slump in sales also cause delay in payment of wages. The weavers also find it difficult to mobilize funds for their working capital needs. At times for the sake of survival they resort to pledging of the silk yarn and zari that they have procured for weaving to the moneylenders. The weavers attached to Cooperative Societies also avail cash advance and housing loan from their Cooperative societies and the deduction of instalments from their wages affects their wage income. The weavers attached to private master weavers are no exception since they also borrow money from their masters for their emergent credit requirements. In this background, in order to understand the influence of various variables on the weaver income, the statistical tests like t-test, correlation analysis, Analysis of Variance and Multiple regression analysis have been attempted in this section.

### **T-test:**

The t-test has been employed to test the following null hypotheses:

1.  $H_0$ : There is no significant difference in average wages earned by men and women
2.  $H_0$ : There is no significant difference in number of days employed between men and women



**Table 5.53 (a)**  
**Group Statistics**

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Wages earned	Male	139	11751.8633	8028.09799	680.93438
	Female	91	11673.4505	8877.81240	930.64761
No. of Days Employed	Male	139	210.36	124.786	10.584
	Female	91	205.90	126.864	13.299

**Table 5.53 (b)**  
**Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Wages earned	Equal variances assumed	.176	.675	.069	228	.945	78.4128	1129.17003	-2146.53006	2303.35558
	Equal variances not assumed			.068	178.747	.946	78.4128	1153.15940	-2197.14486	2353.97038
No. of Days Employed	Equal variances assumed	.008	.927	.263	228	.793	4.46	16.938	-28.916	37.834
	Equal variances not assumed			.262	190.322	.793	4.46	16.997	-29.068	37.985

The results of the t-test are not found to be significant. Hence the null hypotheses are accepted. This is in consonance with the reality that the wages earned by the weaver is fixed based on the complexity of design and craftsmanship than in terms of gender. Similarly, the complexity of the design to be woven and type of the product shall be the major determinant of the period of employment rather than the gender of the weaver. Thus the differences across the gender in terms of wages earned and the days of employment are blurred.

## Correlation Analysis

Weaving being an activity dependent on various factors an attempt has been made here to find whether there exists any relationship among the different variables pertaining to weavers viz., age, years of weaving, no. of looms operated, installed capacity of looms, family members involved in the enterprise, wages earned and years of education. The following table displays the correlation matrix of the different variables.

**Table 5.51**

	Age of the weaver	Years of Weaving	No. of looms	Installed capacity of looms	Actual Output Per year	No. of Days Employed	No. of family members involved in the enterprise	Wages earned	Years of Education
Age of the weaver	1	.431(**)	.188(**)	.047	.037	.033	.188(**)	.018	-.033
Years of Weaving		1	.532(**)	.333(**)	.303(**)	.301(**)	.532(**)	.312(**)	-.057
No. of looms			1	.660(**)	.605(**)	.603(**)	1.000(**)	.564(**)	-.112
Installed capacity of looms				1	.997(**)	.997(**)	.660(**)	.775(**)	-.022
Actual Output Per year					1	1.000(**)	.605(**)	.767(**)	-.011
No. of Days Employed						1	.603(**)	.769(**)	-.012
No. of family members involved in the enterprise							1	.564(**)	-.112
Wages earned								1	-.046
Years of Education									1

\*\* Correlation is significant at the 0.01 level (2-tailed).

From the correlation matrix it could be observed that there exists a positive and significant correlation between the variables viz., age, years of weaving, number of looms operated, number of family members involved in the enterprise. Except the years of education all the other variables exhibited a positive and significant relationship with other variables. A perfect correlation existed among the variables viz., number of days employed and actual output per year, and, the number of looms operated and number of family members involved in the enterprise.

### ANOVA - Analysis of Variance

The following table presents the results of Analysis of Variance (ANOVA) among different categories of weavers (independent, Employed with master weavers, members of Cooperative societies, those who weave both independently and for master weavers and those who weave both independently and for cooperative societies), in terms of number of looms under operation, actual output per year, wages earned, number of family members involved in the enterprise, major sources of financing viz., own sources, cooperatives, master weaver, moneylenders and microfinance.

**Table 5.52**  
**Analysis of Variance**

		Sum of Squares	df	Mean Square	F	Sig.
<b>No. of looms</b>	Between Groups	4.734	4	1.184	3.630	.007
	Within Groups	73.357	225	.326		
	Total	78.091	229			
<b>Actual Output Per year</b>	Between Groups	8557.814	4	2139.454	62.566	.000
	Within Groups	7693.907	225	34.195		
	Total	16251.722	229			
<b>Wages earned</b>	Between Groups	4070072568.038	4	1017518142.009	19.210	.000
	Within Groups	11917814651.010	225	52968065.116		
	Total	15987887219.048	229			
<b>No. of family members involved in the enterprise</b>	Between Groups	4.734	4	1.184	3.630	.007
	Within Groups	73.357	225	.326		
	Total	78.091	229			
<b>Own Sources of funds</b>	Between Groups	29493299.476	4	7373324.869	5.103	.001
	Within Groups	325086309.220	225	1444828.041		
	Total	354579608.696	229			
<b>Loan from Cooperatives</b>	Between Groups	2627415528.599	4	656853882.150	118.512	.000
	Within Groups	1247063400.096	225	5542504.000		
	Total	3874478928.696	229			

		Sum of Squares	df	Mean Square	F	Sig.
<b>Loan from Master Weaver</b>	Between Groups	875424668.856	4	218856167.214	29.814	.000
	Within Groups	1651672070.709	225	7340764.759		
	Total	2527096739.565	229			
<b>Loan from Money lenders</b>	Between Groups	641906126.098	4	160476531.524	8.452	.000
	Within Groups	4271987091.294	225	18986609.295		
	Total	4913893217.391	229			
<b>Loan from Microfinance</b>	Between Groups	65547467.287	4	16386866.822	35.534	.000
	Within Groups	103759837.495	225	461154.833		
	Total	169307304.783	229			

It could be observed from the results of ANOVA that there exists a significant difference among the different categories of weavers on the selected criteria. The cooperative weavers operated lesser number of looms since they were relying on the cooperatives for their orders, but earned a higher wage for their output than the private weavers due to the welfare policies of the cooperatives. Moreover due to the dwindling demand and rising prices of raw materials the Cooperatives are unable to provide raw materials on time which restricts the productivity of the attached weavers. Other weavers who were independent or attached to master weavers had to compensate for their lower wages by producing more. Hence the number of looms they operated was also more. Since the involvement of family members is a factor related to number of looms under operation the same effect is evident for this variable too.

While the weavers attached to cooperatives were provided cash advances and other loans, no such provisions were available for the weavers in the private fold. Even then in many cases it could be found that the weavers due to their indigence, resorted to pledging the silk yarn and zari at times of emergency. Usurious moneylenders, who are the major sources of finance for the weavers add fire to the fury. Microfinance is slowly making its headway into the weaver households, which can help rescue the weaver households from the poverty and debt trap.

#### Multiple Regression Analysis

The Multiple regression analysis has been used to find out the relative importance of various factors which influence the income of the weavers (wages earned) in the study area. As there are several factors which contribute to the income of the weavers in varying measures, the linear multiple regression analysis was identified to be most appropriate statistical tool to assess the influence of independent variables on the dependent variable. In the linear multiple regression model, used in this study, wage income of the weavers (Y) has been taken to be the dependent variable quantifiable variables like age in years ( $x_1$ ), education in number of years ( $x_2$ ), years of weaving ( $x_3$ ), actual output per year ( $x_4$ ), number of days employed ( $x_5$ ), number of family members involved in the enterprise ( $x_6$ ), finance mobilized from own sources ( $x_7$ ), loans obtained from cooperatives ( $x_8$ ), advances obtained from master weavers ( $x_9$ ), credit availed through microfinance ( $x_{10}$ ) and borrowings from moneylenders ( $x_n$ ) have been taken to be the independent variables.

#### Justification for the selection of variables:

**Age in years ( $x_1$ ):** Age is an important factor in the case of weavers, since there are two factors viz., experience and physical fitness, associated with the age of the weavers which have a direct impact over his income.

**Education in number of years ( $x_2$ ):** Education is the basic requirement for gaining awareness about the market developments, technical changes in production, etc. In fact a few technical institutions like CSB prescribe certain level of qualification for the participants of their training programmes. Such enhancement of skills shall help increase the income of the weavers, hence the choice of this variable.

**Years of Weaving ( $x_3$ ):** The dexterity of an intricate art like weaving is developed over a period of time through experience in the activity. A skilled weaver can create exquisite designs. Higher the skillful craftsmanship

greater will be the volume of wages he shall earn. Hence years of involvement in weaving has been chosen as a variable.

**Actual Output Per year ( $x_4$ ):** The quantum of wages earned by a weaver directly depends on the number of sarees or fabric pieces produced by him during a defined period. Hence this variable has been considered for the study.

**No. of Days Employed ( $x_5$ ):** Wages are earned by the weavers only on completion of weaving a fabric for which the weavers slog on the loom for days. Higher the number of days higher shall be the production. So this variable has been considered.

**No. of family members involved in the activity ( $x_6$ ):** Weaving is not a one man show and being a household activity involvement of family members is quite common. Higher the involvement of family members in the activity higher is the wages saved. So this variable considered to have a direct bearing on wage income has been considered.

**Finance mobilized from own sources ( $x_7$ ):** Personal sources of finance occupy the main place among weavers. Whenever there is a financial crisis they resort to personal sources like personal savings, friends/family and relatives, which also has an impact on their income.

**Loans obtained from cooperatives ( $x_8$ ):** Membership in Cooperatives, not only assures better wages but also lends a helping hand in the form of cash advances received from cooperatives which is deducted from the wages due to the members at the time of payment. Since it affects their income this variable has been considered.

**Advances obtained from master weavers ( $x_9$ ):** While it is Cooperatives for the members, the master weavers are the main source of advance for the private weavers. Hence it has also been considered.

**Credit availed through microfinance ( $x_{10}$ ):** Micro finance is slowly emerging in the credit scenario among the weavers. Small credit satisfying the emergent credit needs of the weaver households augments their income, hence has been included as one of the variables for study.

**Borrowings from moneylenders (x<sub>11</sub>):** Formal banking system having shut its doors to weavers, the usurious moneylenders is the source to which the poor weavers have to yield for their emergent credit requirements. The exorbitant rates of interest affects the income of the weavers, hence included for study.

The joint effect of a group of independent variables on the income of the weavers was studied by framing the multiple regression equation of the variable 'Y' on the other independent variables. The following model with 11 independent variables was used:

$$Y = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5 + b_6x_6 + b_7x_7 + b_8x_8 + b_9x_9 + b_{10}x_{10} + b_{11}x_{11}$$

where

Y = Income of the Weavers

a = Intercept (constant)

b<sub>1</sub> to b<sub>12</sub> = Regression Coefficients

x<sub>1</sub> = Age in years

x<sub>2</sub> = Education in number of years

x<sub>3</sub> = Years of Weaving

x<sub>4</sub> = Actual Output Per year

x<sub>5</sub> = No. of Days Employed

x<sub>6</sub> = No. of family members involved in the enterprise

x<sub>7</sub> = Finance mobilized from own sources

x<sub>8</sub> = Loans obtained from cooperatives

x<sub>9</sub> = Advances obtained from master weavers

x<sub>10</sub> = Credit availed through microfinance

x<sub>11</sub> = Borrowings from moneylenders

It was found that there was no multi-collinearity problem. Hence, no variable was removed and all the 11 independent variables were used in the analysis. The results obtained using SPSS 11.5 have been presented in the tables 5.54 (a), 5.54 (b) and 5.54 (c).

Regression co-efficients of the independent variables estimated through multiple regression analysis along with their 't' values and co-efficient of multiple determination ( $R^2$ ) has been given in the table no 5.54 (c).

**Table 5.54 (a)  
Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.795(a)	.631	.613	5198.72635

a Predictors: (Constant), Money lender, Years of Weaving, Own Sources, Years of Education, Master Weaver, Cooperative, Age of the respondent, Microfinance, No. of family members involved in the enterprise, No. of Days Employed, Actual Output Per year

**Table 5.54 (b)  
ANOVA(b)**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10096054476.384	11	917823134.217	33.960	.000(a)
	Residual	5891832742.664	218	27026755.700		
	Total	15987887219.048	229			

a Predictors: (Constant), Money lender, Years of Weaving, Own Sources, Years of Education, Master Weaver, Cooperative, Age of the respondent, Microfinance, No. of family members involved in the enterprise, No. of Days Employed, Actual Output Per year

b Dependent Variable: Wages earned

**Table 5.54 (c)  
Co-efficients<sup>(a)</sup>**

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-121.189	2026.183		-.060	.952
Age of the respondent	-37.386	46.482	-.039	-.804	.422
Years of Education	-7.352	99.804	-.003	-.074	.941
Years of Weaving	74.827	58.314	.069	1.283	.201
Actual Output Per year	-8177.787	2636.030	-8.245	-3.102	.002
No. of Days Employed	591.852	176.270	8.879	3.358	.001
No. of family members involved in the enterprise	2457.895	1206.439	.172	2.037	.043
Own Sources of finance	.043	.290	.006	.149	.882
Finance from Cooperative	.025	.160	.012	.153	.878
Finance from Master Weavers	.154	.117	.061	1.319	.189
Credit through Microfinance	-.515	.475	-.053	-1.085	.279
Credit from Money lenders	.021	.092	.011	.224	.823
$R^2$	0.631				
F	33.960*				

\* Significant at 0.01 level



The table shows that the co-efficient of determination ( $R^2$ ) is 0.631. It denotes that about 63.10 per cent of the total variation of the dependent variable 'Y' (wage income of the weavers) is explained by the independent variables included in the multiple regression analysis.

The F ratio is also found significant. From the value of  $t$  statistic corresponding to the regression co-efficients, it is found that the three variables actual output per year ( $x_4$ ), number of days employed ( $x_5$ ) and number of family members involved in the enterprise ( $x_6$ ) were found to be statistically significant, indicating the importance of these variables in affecting the wage income of the respondents. While the independent variables like number of days employed ( $x_5$ ) and number of family members involved in the enterprise ( $x_6$ ) exhibited a positive relationship with wage income of the weavers, the variable actual output per year ( $x_4$ ) showed a negative relationship.

From the table 5.54 (c) it can be observed that one unit of increase in the number of days employed *ceteris paribus* would increase the weaver income by 592 units and one unit of increase in number of family members involved in the enterprise shall increase the weaver wage income 2457 units, since the expenses of employing an external member is foregone by employing the members of the family. Similarly, an increase of one unit in the annual output shall result in the decrease of weaver income by 8177 units. This is due to the fact that the wages earned for an intricate design is higher but it involves a longer duration of work which restricts the number of sarees produced, whereas simpler designs can be woven faster but the wages earned will be comparatively lesser, hence the inverse relationship.

#### Summary:

In this chapter the profiling of the principal Weavers of the cluster are observed to work predominantly under two major systems viz., Cooperatives or master weavers. A very few are working out of both the systems. The younger generation is conspicuous by its absence, with the scenario

dominated by middle and old aged weavers. While the Cooperatives provide a complete support in terms of production and marketing, the private master weavers provide limited support to the weavers in terms of production and marketing. The wages earned by weavers of Cooperatives are higher per piece of weave due to the welfare orientation of the Cooperatives. Product diversification and technological upgradation are very rare phenomena. Though formal training is given the adoption rate is found to be very low. The Chennai-based textile retail majors like Pothys, RmKV, Chennai Silks, etc., are emerging as an important channel of sales to the weavers. Informal sources seem to dominate the major source of ■finance for weavers and master weavers. Among weavers, micro finance is emerging as a substitute to the usurious moneylenders. There is a dearth of collective action in the case of master weavers / retailers. Lack of awareness about emerging issues like Geographical indication and Silk Mark is observed among the master weavers / retailers.

The results of regression analysis indicates that the variables actual output per year, number of family members involved in the enterprise and days of employment are found to have significant impact on weavers income. The AN OVA results indicate that there is a significant difference among the weavers working under different systems in terms of the chosen variables.

In this background, the following chapter shall be on the qualitative aspects viz., cluster mapping and analysis of the linkages based on the UNIDO cluster development methodology.

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- Balaji R., Kanchipuram Silk Industry: Is the Tradition Wearing Thin? - The Perspective Column, Business Line, June 11, 1996.
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## **Chapter 6**

### **KANCHIPURAM SILK WEAVING CLUSTER - ITS TYPOLOGY, PROFILE AND LINKAGES**

This chapter presents the existing Cluster Map which maps the cluster stake holders and analyses the linkages using qualitative tools developed by UNIDO viz., Cluster Cooperation matrix, Measuring Linkages analysis, Overall Cluster analysis, Cluster selection matrix, typology of cluster matrix, etc. The analysis on the aspects of knowledge management and operation of the diamond of competitiveness in the cluster are also presented in this chapter.

#### **Cluster Map**

The development of a cluster has multiple dimensions, viz., increasing turnover, establishing new markets, enhancing production efficiency, improving environmental conditions, etc. However, creation or improvement of linkages among stakeholders can be the key to progress in any front. For example, in order to establish new markets, competing firms may need to first agree to create a network and liaise with a range of other stakeholders like institutions, BDS providers, new suppliers, new customers, etc. These new linkages add to the social capital of the cluster and provide a good governance structure, which again is the basis for undertaking new activities.

#### **Need for a cluster map:**

Cluster map provides a summary diagrammatic description of (a) types and number of stakeholders involved, (b) nature of linkages of various stakeholders with the principal firms and (c) strength of such linkages.

While the *current cluster map* projects the existing linkages *future cluster map* provides information about linkages that need to be developed, critical stakeholders who need to be created/implanted in the cluster, the links that need to be created thereafter, etc.

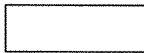






Cluster map is also a very useful tool to demonstrate to cluster stakeholders, related institutions and policy makers regarding the importance of “linkages” in cluster development.

A cluster map can be made with six modules, and is centered on the principal firms to which all other modules are linked, as shown in the figure 6.1.

**Figure 6.1**  
**Six modules of a cluster map**

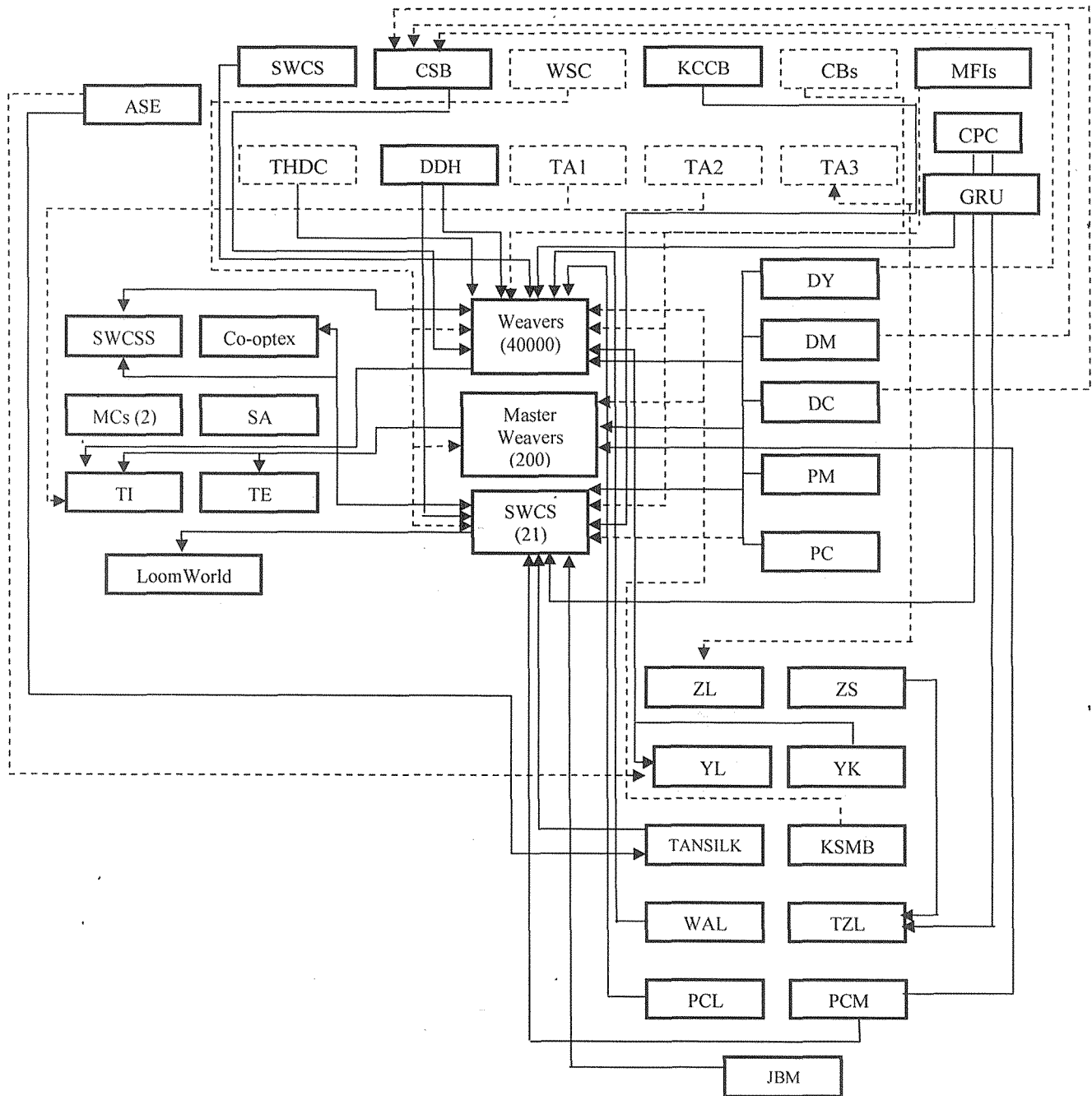
<b>Forward Market Linkages</b> <ul style="list-style-type: none"> <li>● SWCS showrooms (SWCSS)</li> <li>● Co-optex</li> <li>● Loom world</li> <li>● Marketing Coops. (MC)</li> <li>● Sales Agents (SA)</li> <li>● Traders – Internal (TI)</li> <li>● Traders – External (TE)</li> </ul>	<b>Support Institutions</b> <ul style="list-style-type: none"> <li>● Silk Weavers Cooperative Societies (SWCS)</li> <li>● Central Silk Board (SCTH)</li> <li>● Weavers Service Centre (WSC)</li> <li>● Kanchipuram Central Cooperative Bank (KCCB)</li> <li>● Commercial Banks (CBs)</li> <li>● Tamilnadu Handloom Development Corporation (THDC)</li> <li>● Deputy Director (Handlooms) (DDH)</li> <li>● Traders Associations (TA1, TA2, TA3)</li> <li>● Gandhigram Rural University (GRU)</li> </ul>	
	<b>Principal Production System</b> <ul style="list-style-type: none"> <li>● Weavers</li> <li>● Master weavers</li> <li>● SWCSs</li> </ul>	<b>Sub Contracting Firms</b> <ul style="list-style-type: none"> <li>● Dyers (DY)</li> <li>● Designers (Manual) (DM)</li> <li>● Designers (Computerized) (DC)</li> <li>● Punch card makers (Manual) (PM)</li> <li>● Punch card makers (Computerized) (PC)</li> </ul>
	<b>BDS Providers</b>	<b>RawMaterial/Machinery Supplier</b> <ul style="list-style-type: none"> <li>● Zari merchants – Local (ZL)</li> <li>● Yarn traders – Local (YL)</li> <li>● Zari merchants – Surat (ZS)</li> <li>● Yarn traders – Karnataka (YK)</li> <li>● Anna Silk Exchange (ASE)</li> <li>● Karnataka Silk Marketing Board (KSMB)</li> <li>● TANSILK</li> <li>● Tamilnadu Zari Limited (TZL)</li> <li>● Weaving appliance supplier – Local (WAL)</li> <li>● Punch Card Suppliers – Madurai (PCM)</li> <li>● Punch Card Suppliers – Local (PCL)</li> <li>● Jacquard box suppliers – Madurai (JBM)</li> </ul>

**Figure 6.1 (a)**  
**Tools for drawing a cluster map**

A thin-bordered rectangular box for a group of stakeholders. The firms in a group are near similar and are not necessarily linked to each other	
A thick/dotted – bordered rectangular box for showing a well/poorly functioning network of inter-related stakeholders	 
A thick/dotted one-sided arrow to show a well/underdeveloped linkage between two stakeholders (or network of stakeholders); the point of the arrow meets the stakeholder that receives goods/services from the other stakeholder	 / 
A thick/dotted two sided arrow to show a well/underdeveloped linkage between the two stakeholders that have a subcontracting relationship	 / 
Parenthesis to show the number of stakeholders in a group/network	{ }



**Figure 6.2**  
**Current Cluster Map**



## Measuring Linkages

**Table 6.1**  
**Broad Typology of the Cluster**

S.No.	Particulars	H/M/L/N
1	Number of principal firms	H
2	Domestic market share of principal firm	L
3	Export market share of principal firms	N
4	Structural Efforts for growth by principal firms	N
5	Number of support firms	M
6	Domestic market share of support firms	H
7	Export market share of support firms	N
8	Structural Efforts for growth by support firms	N
9	Relationship between principal and support firms	Hierarchical
10	Presence of technical institutions	M
11	Pro-activeness of technical institutions for growth of principal firms	L
12	"Planned efforts" for growth through cooperation framework .	L

Key: H - High; M - Medium; L - Low; N - Negligible or Nil.

The cluster can be categorized based on this analysis as an '*underperforming cluster*<sup>1</sup> due to the following reasons:

- There are only a few principal firms in the cluster which are into active business. Even among them there is dearth collective thinking about the development of the cluster's business. In fact, a phenomenon of *group think* is observed.
- The market share of principal firms is low, since the market is oligopolistic and now is getting to the hands of external giants located at Chennai and other cities.
- Export of Kanchipuram silk is almost nil, due to the inherent difficulties like inability to maintain uniform product quality, lack of awareness about export procedures, fear of loss due to return of goods on rejection, prevalence of wage issues affecting availability of labour, etc.
- Retention of the existing business is itself a crisis, at present for the cluster members, hence, expansion & growth doesn't find a place in their agenda. Strategies for survival are the present foci of the cluster participants. There is no proper mechanism for formulating the growth strategies for the cluster,

since business development service (BDS) providers are absent in the cluster.

- 9 Though there are a good number of support firms in the production arena, in the case of business development, the service providers are conspicuously absent.
- Since the demand for the production support services is '*derived*' from that of the principal firms, their focus is also mere survival, not expansion, growth or export.
  - The relationship between the principal and support firms is pre-dominantly hierarchical. The ties are traditional; hence there exists a hierarchical relationship. Moreover, the complete dependence of the support firms on the principal firms for orders strengthens the hierarchical structure.
- o Technical institutions like Central Silk Board (CSB) and Weavers Service Centre (WSC), which perform research, testing, design development and dissemination functions, are present in the cluster. But their interaction is limited to a certain section of the principal/support firms. While the CSB prefers to work only with master weavers, the WSC confines itself to servicing the Cooperatives, on the latter's request. Some agencies that are external to the cluster like Indira Gandhi Centre for Atomic Research (IGCAR), Kalpakkam have intervened through special projects in the cluster and have helped in developing XRF analyzer for non-destructive zari testing.
- The CSB and WSC being institutes of national presence are involved in continuous research on handlooms. Whenever there is a development of appropriate technology for the cluster, they try to disseminate the knowledge through their training programmes. But mostly the role has been '*reactive*', i.e., initiatives are taken up at the request of the cluster members.
  - The Kanchipuram silk weaving cluster has to its credit, a self-initiated cooperative movement. All the major initiatives in the cluster have been brought through the cooperative movement to the cluster. Major initiatives like streamlining the procurement of yarn, production of zari, streamlining of zari price, standardization of zari quality, establishment of 'co-operative'

logo, obtaining the quality certifications like 'silk mark' and 'handloom mark', establishment of zari testing centre, obtaining geographical indication for 'Kanchipuram' silk, etc., have been pioneered by the co-operatives, due to the strong support of the government enjoyed by them. These initiatives have benefited not only the co-operatives but also other participants of the cluster, thereby boosting the competitiveness of the cluster as a whole. Still the market expansion has been a major challenge, which hurdles the growth of this cluster.

Table 6.2  
Status of Linkages between Stakeholders

S.No.	Linkages between Stakeholders	Status
1	Relationship between a group/network of principal firms and a group/network of support firm(s)	Strong
2	Relationship between a group/network of principal firms and a group of BDS provider (s) or a single BDS provider	Weak
3	Relationship between a group/network of principal firms and marketing channels	Weak
4	Relationships within a network of principal firms	Weak
5	Relationship of an institution with group/network of principal firms	Weak

The relationship among the stakeholders viz., principal firms, support institutions, forward/backward linkages, BDS providers, etc., has a deeper impact on the competitive advantage of a cluster. While the cluster map portrays such linkages pictorially, this section attempts to explain the same in words in five major dimensions as detailed here.

#### **1. Relationship between a group/network of principal firms and a group/network of support firm(s):**

The relationship between the principal firms (Individual Weavers, Weaver Cooperatives and private master weavers) and that of supporting firms (zari/yarn sellers, designers, dyers, punch card makers etc.,) is strong, because



- These firms have developed a niche in the product/service. They are the exclusive suppliers of the above services and the linkages are traditional.
- The principal firms are fully dependent upon these firms for the supply of services. Since the relationship is in existence for generations it keeps going without much of formal agreements. The mutual trust and loyalty form the bases of the relationship
- The principal firms depend on these support firms for continuous innovation in the product to remain competitive. For example, attractive design and colour combinations are the eye-catchers in a silk saree. The support firms who specialize exclusively in these aspects are the main source for the principal firms to remain competitive by introducing new varieties and designs. Moreover, these support firms due to their specialized knowledge act as the conduit for transferring the market intelligence information viz., trendy designs, new varieties that attract customers, changes in technology, etc.

But, there are also a few areas of concern, like

- ® The major changes in the product/service have started coming from outside the cluster these days. That too, after the intervention of large trading houses from Chennai into the market, the innovation happens outside the cluster and the cluster members become mere followers of the trend initiated from outside. With the mighty investments made on R&D and sales promotion by the large trade houses, not only the smaller firms in the cluster but the larger firms too find it difficult to follow suit.
- ® But the profitability of the support firms is decreasing since their demand is derived and is affected by the overall slump in sales.

## **2. Relationship between a group/network of principal firms and □ group of BDS provider (s) or a single BDS provider:**

- The concept of Business Development Service (BDS) is totally alien to the cluster.

- The cluster is yet to realize the importance of business development service
- The large trade firms existing outside the cluster have a well developed relationship with professional BDS providers, which is absent in the cluster
- Most of the principal firms, due to their lack of awareness, think that it is a wasteful expenditure to utilize the services of BDS providers.
- Though the institutions like Central Silk Board & Weavers Service Centre offer technical support and consultancy services, the facilities are hardly made use of by the principal firms

### **3. Relationship between a group/network of principal firms and marketing channels:**

- ® Instead of contributing substantially to the product innovation and new product development, in most cases, the principal firms simply carry out the processes as suggested by the channel.
- The channel consisting of larger firms and middlemen dictate the processes to be carried out by the principal firms
- ® In the case of cooperatives, they have very less interaction with other marketing channels. But they have established their own linkages, which suffer due to the problems of bureaucracy, lack of an integrated approach, lack of professionalism, etc.
- ® In the case of private firms and individual producers, the large traders and other channel members like middlemen carry out price negotiation. Due to piling up of stocks the principal firms yield to such deals and sell at a low margin.
- In the case of cooperatives, the customers are directly approached by eliminating middlemen. But sales promotion is a rare phenomenon. Bulk discounts even up to 55% eating away from the coffers of the cooperatives is the major way to rope in customers into the showrooms. Thus the price based negotiation takes a different form in the case of cooperatives.

#### **4, Relationships within a network of principal firms:**

- This is one of the serious issues in the cases of both cooperative and private principal firms
- There is lack of serious approach to common issues facing the cluster like increasing use of fake zari, unfair trade practices, effluent treatment, increasing prices of raw materials
- There is a steady decline in the number of active members both in the cases of Cooperatives as well as the trade associations.
- There has been some protests regarding the price hike of silk yarn and zari, but such efforts are once in a blue moon.
- There are few numbers of sustainable efforts in the directions of establishing common facilities that shall serve the cluster.
- The concept of 'Loom World', which was introduced as the single-stop shop for wedding purchases from all cooperatives under one roof, also was of external origin, but not the product of interaction among the networks existing inside the cluster

#### **5. Relationship of an institution with group/network of principal firms:**

- There is no regular interaction with technical institutions like Weavers Service Centre (WSC), Central Silk Board (CSB) along with the network of principal firms.
- 9 Though there are some areas of cooperation like yarn testing facility etc., it has not filtered out to an integrated approach to boost the competitiveness of the cluster
- 9 The major drawback is the institutions like Cooperatives and trade associations focus on survival rather than growth of the cluster. The phenomenon of *groupthink* is observed. Such an approach ails the cluster.

### **Cluster Cooperation Matrix**

Social capital is similar to other forms of capital, such as machinery (physical capital) and training (human capital), in the sense that its presence significantly increases the productivity of labour. Like other forms of capital it is accumulated over time. The social capital accumulated during a long common history in performing clusters is the reason why the stakeholders find it natural to disclose their problems and agree on a set of activities that can help solve those problems. Each successfully solved problem or efforts made for the same increases the quantum of social capital and lead new joint activities in the cluster.

In a cluster, level of social capital can be enhanced by:

- (a) promoting forums for a dialogue among cluster stakeholders by reactivating of networks/associations,
- (b) Encouraging cross-fertilization of ideas via the umbrella associations of the different cluster stakeholders
- (c) Disseminating awareness about the advantages of joint action through the cluster, and
- (d) Enabling cluster leaders to conceptualize and implement joint initiatives.

The creation of social capital is often not considered a priority area because the fruits of social capital are less visible than other forms of capital investment. In a performing cluster, sound infrastructure, new technologies and good support services are more visible than the focused joint actions that were often required to generate them. Therefore, this requires investments of resources (time, capital, manpower) and some well-tested techniques, to achieve the same.

The current status of social capital in a cluster can be gauged with the help of a cooperation matrix. Each cell in the matrix assigns a value to the strength of linkage between two stakeholders in the cluster. (UNIDO 2005) The following table presents a hypothetical picture of the relationships in the Kanchipuram Silk Weaving Cluster.

Table 6.3  
Cluster Cooperation Matrix for the Kanchipuram Silk Weaving Cluster

S. No	INSTITUTIONS	SWCS	TA <sub>1</sub>	TA <sub>2</sub>	TA <sub>3</sub>	CSB	DDH	WSC	ASE	KSMB	TZL	TANSILK	COOPTEX	NGOs	TE	TI	THDC	Total
1	SWCS	1	0	0	1	1	4	2	4	0	4	4	3	0	2	1	0	27
2	TA <sub>1</sub>	0	1	2	2	1	0	1	0	0	0	0	0	0	1	3	0	11
3	TA <sub>2</sub>	0	2	1	2	1	0	1	0	0	0	0	0	2	1	3	0	13
4	TA <sub>3</sub>	1	2	2	1	1	2	1	0	0	0	0	0	0	1	3	0	14
5	CSB	1	1	1	1	1	1	1	4	1	0	4	0	0	0	2	0	18
6	DDH	4	0	0	2	1	1	2	4	1	4	4	2	0	1	1	2	29
7	WSC	2	1	1	1	1	2	1	0	0	0	0	0	3	0	1	0	13
8	ASE	4	0	0	0	4	4	0	1	0	0	4	0	0	0	0	0	17
9	KSMB	0	0	0	0	1	1	0	0	1	0	0	0	0	0	3	0	6
10	TZL	4	0	0	0	0	4	0	0	0	1	2	0	0	0	0	0	11
11	TANSILK	4	0	0	0	4	4	0	4	0	2	1	0	0	0	0	0	19
12	COOPTEX	3	0	0	0	0	2	0	0	0	0	0	1	0	0	0	0	6
13	NGOs	0	0	2	0	0	0	3	0	0	0	0	0	0	2	2	0	9
14	TE	2	1	1	1	0	1	0	0	0	0	0	0	2	0	3	0	11
15	TI	1	3	3	3	2	1	1	0	3	0	0	0	2	3	0	0	22
16	THDC	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
	Total	27	11	13	14	18	29	13	17	6	11	19	6	9	11	22	2	228

**Key:** SWCS – Silk Weaver Cooperative Societies; TA<sub>1</sub> – Saree Traders Association; TA<sub>2</sub> – Small Traders Association; TA<sub>3</sub> – Zari Traders Association; CSB – Central Silk Board; DDH – Deputy Director office (Handlooms); WSC – Weavers Service Centre; ASE – Anna Silk Exchange; KSMB – Karnataka Silk Marketing Board; TZL – Tamilnadu Zari Limited; TANSILK – Tamilnadu Cooperative Silk Producers Federation Limited; NGOs – Non Governmental Organisations, TE – Traders External, TI – Traders Internal, THDC – Tamilnadu Handloom Development Corporation.

**Scores:** 0 – No linkage and/or open conflict; 1 – Stakeholders barely know each other, no impact on the cluster as a whole; 2 – Positive linkages and some history of mutual help, some impact in the cluster; 3 – Strong propensity to cooperate based on a supportive history; 4 – Excellent existing linkages with significant impact on the cluster as a whole; NA – Not Applicable.

The linkages among the different agencies functioning in the Kanchipuram silk cluster are shown in the table above. In many cases, there is a fragile or no relationship/linkage among some important agencies. In particular, the DDH office has scored the highest points closely followed by Silk Weaver Cooperatives, precisely because of their established administrative linkages with other government agencies. It is also important to note that most of the agencies listed are either government agencies or have been established at the instance of government/cooperatives. Though services of the agencies like ASE, WSC are open to all, the private sector players pre-dominantly stay away. Even the traders association, confine themselves only to advocacy role. Hence the linkages have been poor with other agencies.

In the case of NGOs, there have been some important interventions, for example the child labour survey by RIDE (See Annexure - 1) has brought out some important facts to the notice of the administration; another NGO, Hand-in-Hand has conducted a training programme for weavers under Integrated Handloom Training Project along with the Weavers Service Centre and has tried out a different marketing linkage for the produce of those weavers. These NGOs have also played a vital role in enrolment of child labourers in looms into the 'Moonlight' schools organised by the district administration.

Moreover, they are also implementing other income generation projects viz., Hand-in-Hand in collaboration with Confederation of Indian Industry (CII) is running two training centres on power, machine tailoring for women, who are also placed in popular garment companies (See Case study - Weaving Unit Experiment). Such linkages can be harnessed if they are collaborated within the cluster activities.

The linkages with the technical and R&D institutions like CSB and WSC have to be strengthened and extended to the private sector to facilitate dissemination of technology to boost the technological competitiveness of the cluster and reduce drudgery and related costs. These institutions must be consulted for finding out solutions for the common problems facing the cluster

like effluent treatment and disposal, product modification, loom modification, technology upgradation, etc.

Linkages with academic, research and training institutions is another important area which is found missing in the cluster. Institutions like JSN School of Management services, operating in the cluster, has implemented a research project on 'Internationalization of Traditional SME clusters', funded by European Union, can be utilized for conducting research on the cluster and organize Management Development Programmes for the cluster members to improve the cluster competitiveness. Forging a strategic alliance with such institutions shall greatly help in internationalization of the cluster.

For export orientation of the cluster, it is essential to take the private sector into confidence, since they shall be better equipped and willing to participate. Presently due to lack of support and guidance they are hesitant to take up export. It shall be good if the model of the leather sector be emulated here. In the case of leather sector, Council for Leather Exports, is promoting and facilitating the leather exports by organizing exhibitions, trade fairs and sending business mission abroad. Such a strategy shall be helpful in this cluster too. Because of the gap in linkages, the apparel park initiative has not evinced any response from the cluster, though it has been made available to the cluster. Such opportunities can be harnessed if better linkages are fostered.

Formation of Cluster Consortia and Cluster Development and Coordination Committee, shall enhance the possibilities of enunciating active participation of the stakeholders in the cluster development process. Better results in terms of sustainability shall be achieved by encouraging consortia-led interventions with the Cluster Development Agents and the Directorate playing a catalytic role.

Cluster development shall not be a viable strategy for all the clusters. There must be some factors which shall help in enhancing the promotability aspects. Hence an analysis to gauge the promotability of the cluster has been found essential by agencies like UNIDO. In this section, an attempt has been made to analyse the Kanchipuram silk cluster based on the criteria developed by UNIDO, in order to find out the possibilities of its development to better levels.

**Table 6.4**  
**Cluster Selection Table**

S. No.	Particulars	Weight (%)	Score	Weighted Score
1	Existing Contribution to local economy	10	7	0.7
2	Location of Cluster	10	8	0.8
3	Outreach	20	9	1.8
4	Socio-environmental condition	0	2	0
5	Market Potential	40	6	2.4
6	Promotability	15	2	0.3
7	Subsidiarity	5	2	0.1
	<b>Total Weighted Score</b>	<b>100</b>	<b>36</b>	<b>6.1</b>

**1. Existing Contribution to local economy:**

The Kanchipuram Silk Weaving cluster is a traditional handloom cluster dominated by small and medium enterprises. According to an informal estimate by the Kanchipuram Silk Zari Sarees Traders Association, the market is dominated by the Micro Small and Medium Enterprises (MSMEs).

**Table 6.4 (a)**

S. No	Size of the Retailing firm (Sales Turnover per annum)	Percentage
1	Rs.25 lakhs - Rs,50 lakhs	70%
2	Rs.50 lakhs - Rs.1 Crore	25%
3	Above Rs.1 Crore	5%

Source: Estimates by Traders Association



With the widespread number of weavers, who also operate independently the number of firms benefited is still high. Moreover the related occupations (pre-loom and post-loom) about 16 in number also are affected by the main production system (as seen in the cluster map), since their demand is derived. Each loom in operation thus keeps all these occupations alive, hence employs more than a million people directly and indirectly. Informal sources say that about 70 per cent of Kanchipuram's local economy is intertwined with that of the silk weaving industry. Except for the brief lull during the rainy months, the industry is almost active throughout the year. Being the second identity of the temple city, Kanchipuram, also popularly known as the '*silk city*', stands testimony to the vitality of the industry to this traditional town.

## **2. Location of the cluster:**

Silk weaving activity is traditional and has a grand lineage at Kanchipuram. It is natural cluster, in which during the days of yore, people settled around the Palar river basin, which had a significant property of fastening bright colours on silk yarn. Moreover, being a temple town and the capital city of ancient rulers of South India, weaving activity was very active. Later, when Chennai started gaining supremacy from the british era and became the state capital, Kanchipuram because of its proximity to the city had access to market. Even today, the production activity is concentrated in and around five kilometers radius of Kanchipuram. While active weaving has shifted to the outskirts of the town, retailing is still at the heart of the city. The strong market linkages with large traders in Chennai, like Pothys, The Chennai Silks, RmKV Silks, Kumaran Silks, Nalli Silks and Saravana stores is a locational advantage for the cluster. The support firms like the dyers, designers and technical institutions like Central Silk Board, Weavers Service Centre, etc., have a strong presence in the cluster which is also an advantage for the cluster.

## **3. Outreach/Replicability:**

The industry is dichotomous with both organized and unorganized players in the market. While the Cooperative sector constitutes the organized

sector, the private players come under the unorganized category. There are similar silk handloom clusters in the vicinity like Arni (Vellore District), Kumbakonam (Tanjore District), Salem, Tirubuvanam, etc., which are competitors to the Kanchipuram cluster, and are also facing the similar threats/opportunities in the business environment. Hence an organized cluster development effort in this cluster can serve as a basis for replication in the other clusters mentioned above.

#### □□ □□□□□□ and environmental conditions

The cluster though is dominated by SMEs, the market is controlled by a few powerful groups of retailers. Since the ties are traditional any radical change is still a challenge for the cluster. The wage differentials that exist in the cluster are also high. While the weavers in the Cooperative Sector get better wages than those of their counterparts in the private sector, they face the problems of irregular orders, delayed supply of raw materials. Modification of looms is the most difficult thing for the production system. Though agencies like CSB and WSC are present in the cluster who disseminate knowledge on looms modification, the subsequent adoption of technology is low. At the same time, based on the market requirements some technologies have been rapidly adopted viz., computerized designing, automated manufacture of design punch cards. The jacquard weaving which is presently in use in the cluster is almost four decades old. The issue of effluent disposal has not been pursued effectively in the past. But now plans are on, to establish a common effluent disposal / treatment plan for the cluster as a whole under SITP project. With regard to quality of the products, there is a problem of using fake zari and use of synthetic yarn intertwined with the silk yarn in the manufacture. This brings down the cost of production, but the genuine products are affected due to this unfair practice. Even the practice of selling, silk fabrics of other clusters, in the brand name 'Kanchipuram' is prevalent affecting the prospects of the cluster. Effective implementation of the 'Geographical Indication' provisions shall be of help in this direction.

## 5. Viability

### *Prospects of upgrading the production technology:*

Presently in the production scenario, age old looms are used for production. The looming technology is almost four decades old. In the recent past, there have been no significant changes in the method of production or the types of products produced. Some of the technologies introduced were either -unsuitable for local conditions or did not have technical/financial support/follow up to encourage adoption. But value addition in products, by introduction of additional processes is emerging in the recent years. Moreover adoption of information technology in the areas of production, designing and testing indicate the scope for upgrading the production technology. Substitution of handlooms by powerlooms or other automated technologies shall not work with this cluster because the machines cannot handle the yarn softly/gently as done carefully by the dexterous weavers. Moreover mass production cannot be done since varieties become important in this product segment than similar ones.

### *Future of the product in current and national/global settings*

Though the market scenario is changing, there is also a shift in the tastes/preferences of the consumers; the industry has been able to survive since the traditional occasions/practices are still in vogue. But for a sustainable future and to revive the industry from decline, it is very much essential to look-out of the borders for export market. Product modification is the key to capture export market. Moreover with the present technology execution of export orders is impossible since uniform product quality cannot be ensured in handlooms. The uncertainty of labour availability/wage structure is another challenge in this direction.

### *Main markets (geographical, consumer segments)*

Though informal sources perceive that the main customers for the cluster products are from Andhrapradesh, Karnataka and merchant community of Chettinad (Tamilnadu), the market segmentation analysis (vide tables 4.13 & 4.14) reveals that there is a clear concentration of the market in Tamilnadu.

### *Major threats*

The availability of cheaper substitutes from Arni and Kumbakonam, Unfair market practices of marketing products of other origins in the name of Kanchipuram silk, bogus cooperatives, use of duplicate (half fine) zari, lack of clarity about 'Geographical Indication' protection, confusion about handloom mark/silk mark, competition from powerloom products, lack of interest among the young generation towards weaving are the major threats to the cluster. An exhaustive list of the Strength, Weaknesses, Opportunities and Threats of the cluster are given in the SWOT analysis section of this study.

### *Stage of product in product life cycle*

The products are in the decline stage of the product life cycle.

## **6. Promotability:**

*Product upgrading or diversification, exploration of new markets, technological innovations, investment in updated equipments, etc.*

Based on the market requirements some technologies have been rapidly adopted viz., computerized designing, automated manufacture of design punch cards, etc. The jacquard weaving which is presently in use in the cluster is almost four decades old. The issue of effluent disposal has not been pursued effectively in the past. But now plans are on to establish a common effluent disposal / treatment plan for the cluster as a whole under SITP project.

In the recent past, there have been no significant changes in the method of production or the types of products produced. Some of the technologies introduced were either unsuitable for local conditions or did not have technical/financial support/follow up to encourage adoption. But value addition in products, by introduction of additional processes is emerging in the recent years. Moreover adoption of information technology in the areas of production, designing and testing indicate the scope for upgrading the production technology.

One of the important noteworthy features is that the birth rate of firms does not exceed the closure rate. In fact, the rate of closure is reported to be a bit high in the cluster.

### *Sensitivity of the firms to major issues*

The reactions have not been strong enough towards the issues facing the cluster. A very few common facilities are available in the cluster to face the common problems. Some of the common facilities like centralized yarn/zari procurement, common showroom/shopping complex, credit facilities, training facilities, testing services are open only to cooperatives. The private sector remains uncovered by these services.

### □□ **Complementarity**

#### *Potential for complementing other developments*

There are some strong institutional linkages existing in the cluster. But the complementarity has not manifested since there is lack of an integrated approach.

Being a place of historical importance and tourist interest, if this cluster is organized well and the services are well integrated then it can be promoted as a package of tourism and shopping. Even fairs can be organized and new market opportunities can be explored.

#### *Scope for value added of a support project*

A cluster development project, which can initiate the integration of different stakeholders, shall extensively benefit the cluster.

A Logical Framework (chapter 8) has been prepared for the development of Kanchipuram Silk Weaving Cluster taking into account the issues discussed above and care has been taken to make it relevant to the field realities.

## **Section - II**

### **The Diamond of Competitive Advantage in the Kanchipuram Silk Weaving Cluster**

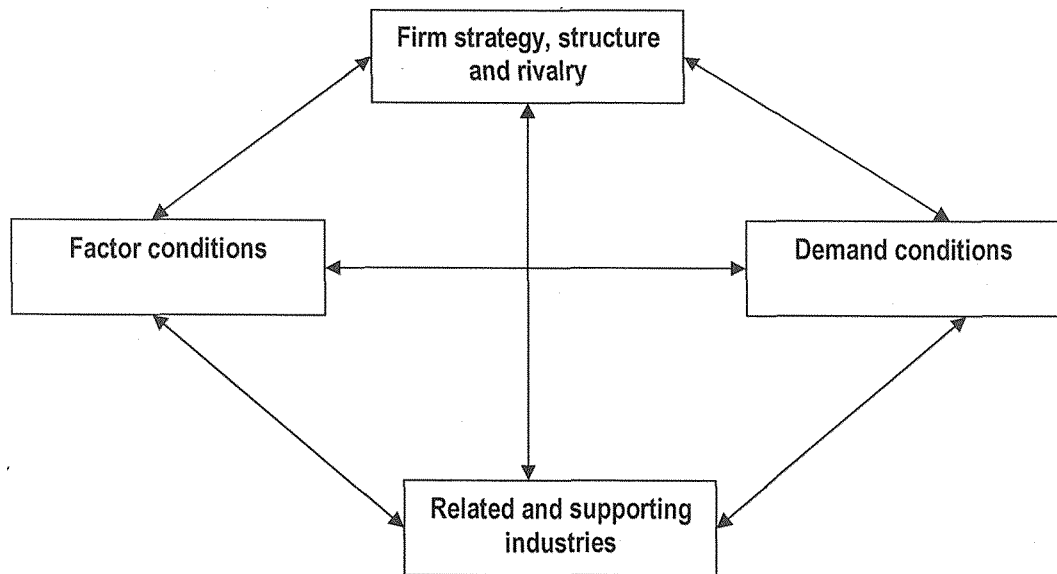
*'Kanchipuram silk'* has its own fascination and brand equity, even while an array of silk fabrics from Ami, Dharmavaram, Kumbakonam, Tirubhuvanam, etc., are also competing in the market. What makes it so special to surpass others? Its special quality is a product of the interaction of four important forces which puts it in the top position. A peep into these forces and their contribution to competitiveness of Kanchipuram silk cluster is attempted in the following passages.

Porter (1990) has developed a few parameters to assess the competitiveness of firms and nations, which could possibly be used for clusters as well. Porter modeled the effect of local business environment on competition in terms of four interrelated influences, which are presented in the shape of a diamond; hence, it has come to be widely known as the Diamond theory (see figs). These influences are: factor conditions (the cost and quality of inputs); demand conditions (the sophistication of local customers); the context for firm strategy and rivalry (the nature and intensity of local competition) and related support industries (the local extent and sophistication and suppliers and related industries). Diamond theory stresses the production of a dynamic, stimulating and intensely competitive environment by combination of these elements. A cluster is the manifestation of the diamond at work. Proximity, the co-location of companies, customers and suppliers-amplifies all the pressures to innovate and upgrade. The current debate rests still largely on establishing clusters as the basis of competitiveness of regions and economies (Gulati 2001).

Competitive advantage, according to Porter (1990) is a product of the functioning of these four broad attributes (factor conditions, demand conditions, firm strategy, structure and rivalry and Related and Supporting industries) as a system. Each of these four attributes defines a point on the diamond of national advantage; the effect of one point often on the state of others. Weaknesses in any one determinant will constrain an industry's potential for advancement and

upgrading. But the points of the diamond are also self-reinforcing: they constitute a system.

**Fig 6.3 (a) The Diamond of Competitive Advantage**

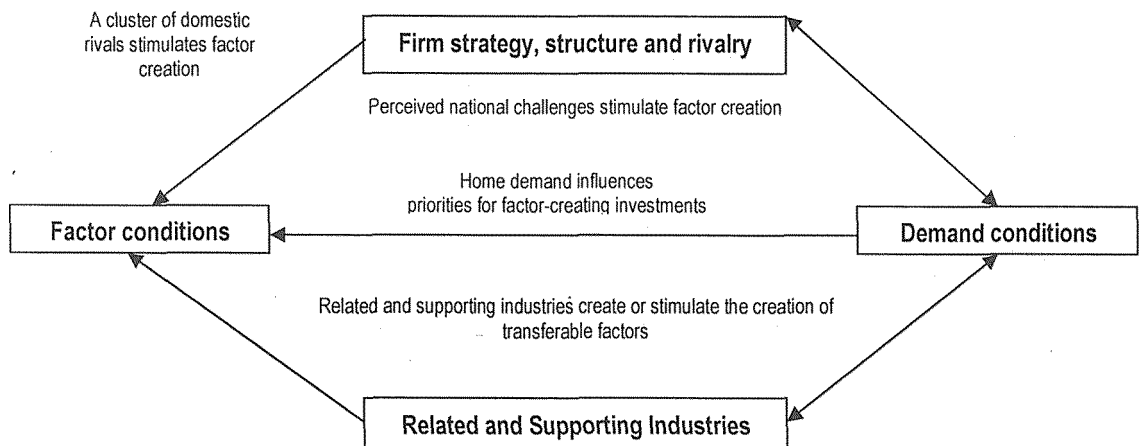


Source: Gulati (2001)

#### **Factor conditions:**

These are related to the position of factors of production such as skilled labour, capital and infrastructure necessary to compete in the given industry.

**Fig 6.3 (b) Influences on Factor**



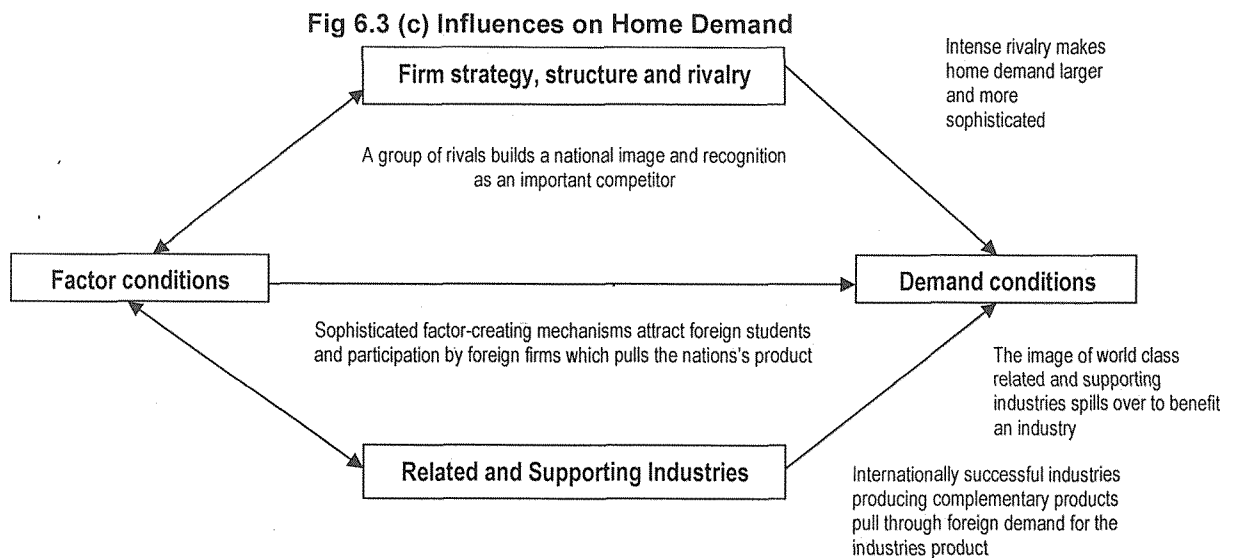
Source: Gulati (2001)

In the case of a traditional cluster like Kanchipuram, the main strength is the presence of skilled craftsmen i.e., weavers, who are dexterous in creating

the product with the unique features. This is followed by the specialty of Palar river water of Kanchipuram, which possesses this unique quality of imparting lusture to raw silk. Apart from this presence of institutions like Anna Silk Exchange and KSMB which ensure regular supply of yarn to the cluster and Tamilnadu Zari Limited and Centralised Purchase Committee which regulate the price and supply of zari to the cluster, technical institutions like Central Silk Board and Weavers Service Centre which offer the necessary support in terms of research and development, help the cluster in producing the best quality fabric and command superiority in the market.

#### □□□□□□ **Conditions:**

This denotes the nature of home demand for a product.



Source: Gulati (2001)

The silk saree, being a commodity of mass consumption and is also a luxury product, the buyers expect fulfillment of certain quality standards. Due to the presence of large number of sellers in the market, there is also a wider choice for the buyer. This mounts pressure on the industry to innovate faster and achieve more sophisticated competitive advantages than their rivals. So product differentiation in terms of variations in combination of colours, computerized designing, attractive patterns, is the major strategy to attract customers to the product. Recently, branding and aggressive promotion are

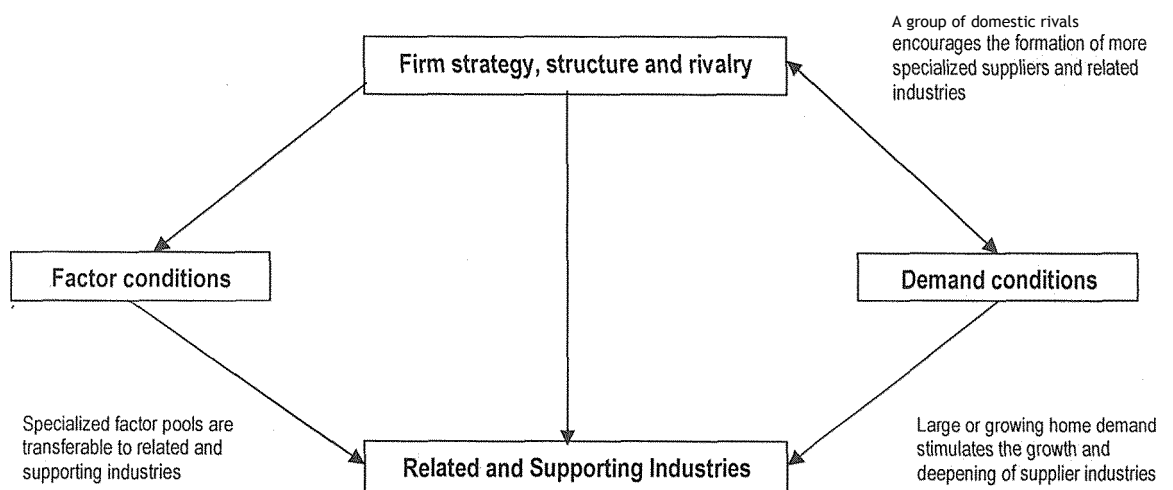


emerging as an important strategy for demand creation. Thematic designs are developed and popularized, so as to attract customers to the product and win over the competition. At times *tailor-made* products are offered as per the needs of the customer by changing the design/colour combinations on their choice, helps to satisfy the buyer demands.

### Related and Supporting Industries:

This relates to the presence of quality players in the cluster, who provide the related and supporting services.

**Fig 6.3 (d) Influences on Development of Related & Supporting Industries**



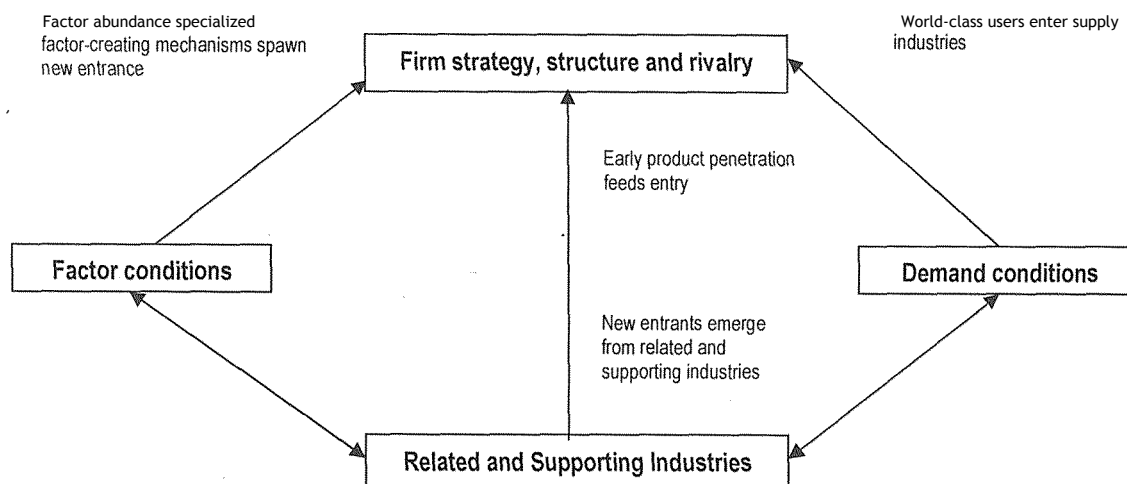
Source: Gulati (2001)

As far as the Kanchipuram silk industry is concerned, the support activities that provide the pre-loom and post-loom services are well established. The pre-loom service providers like yarn/zari suppliers, yarn twistors, dyers, suppliers of weaving accessories, designers, design punch card makers, jacquard box suppliers are all present in the cluster. Some sellers, external to the cluster, from Karnataka (yarn), Surat (Zari), and Madurai (Jacquard box/punch card) have established contacts with the producers in the cluster. Many of these ties are traditional and this helps the smooth flow of services without much of formal contractual procedures. But in the case of cooperatives, the formal procedures are adopted to ensure the services of these suppliers.

### Firm Strategy, structure and rivalry:

This relates to the conditions in the cluster governing how companies are created, organized and managed, as well as the nature of domestic rivalry.

Fig 6.3 (e) Influences on Domestic Rivalry



Source: Gulati (2001)

In this cluster, the origins of firms are predominantly traditional and spin-offs in a few cases. Most of the enterprises are inherited from the ancestors and are carried out by the subsequent generations. Hence, the knowledge transfer is mostly by socialization. The ties are almost familial. Earlier the structure of the industry was aligned with the caste system, where people of certain community have been assigned certain-tasks. Now it is no more the domain of particular community, other communities are also involved in the trade. In the production system, the individual weaver shall either be attached to a master weaver or a cooperative society and shall produce for wages. These agencies (master weaver or cooperatives) shall market the produce for a profit. Due to the homogeneity of the product and presence of multiple sellers in the market, there is intense rivalry among the industry players to attract customers.

### Effects of the interaction of the $\square\square\square\square\square\square$ as a system:

Two elements, domestic rivalry and geographic concentration, have especially great power to transform the diamond into a system - domestic rivalry because it promotes improvement in all the other determinants and

geographic concentration because it elevates and magnifies the interaction of the four separate influences.

Vigorous domestic rivalry stimulates the development of unique pools of specialized factors, particularly if the rivals are all located in one city or region. The effects can work in all directions: sometimes world-class suppliers become new entrants in the industry they have been supplying. Or highly sophisticated buyers may themselves enter a supplier industry, particularly when they have relevant skills and view the new industry as strategic.

This phenomenon is true in the case of Kanchipuram Silk Cluster. Due to vigorous domestic rivalry and geographic concentration, big retail houses like the RmKV, Pothys, The Chennai Silks, etc., who were earlier business buyers from the cluster, have made a big sway into the industry, by introducing product and market innovations, thereby introducing dynamism in the industry. With their powerful strategies of branding the silk sarees, value addition and aggressive promotion, there has been a revival in demand for the product. Moreover, the market has also witnessed a shift from the cluster to Chennai where their showrooms are located. Due to their skillful marketing innovations, some products like silk skirts, which were almost written off from the production line, were revived and achieved a grand reception among the customers.

Another effect of diamond's systemic nature is that nations are rarely home to just one competitive industry, rather, it creates an environment that promotes *clusters* of competitive industries which are usually linked together through vertical (buyer-seller) or horizontal (common customers, technology, channels) relationships. Thus the benefits flow forward, backward and horizontally.

Aggressive rivalry in one industry spreads to others in the cluster, through spin-offs, through the exercise of bargaining power and diversification by established companies. Entry from other industries within the cluster spurs upgrading by stimulating diversity in R&D approaches and facilitating the introduction of new strategies and skills. Through the conduits of suppliers or customers who have contact with multiple competitors, information flows freely

and innovations diffuse rapidly. Interconnections within the cluster, often unanticipated, lead to perceptions of new ways of competing and new opportunities. The cluster becomes a vehicle for maintaining diversity and overcoming the inward focus, inertia, inflexibility, and accommodation among rivals that slows or blocks competitive upgrading and new entry.

In the case of Kanchipuram Silk cluster, the competitiveness of this cluster has also helped the tourism industry to prosper. Kanchipuram, also having an identity of temples, is thronged by devotees across the borders. While the silk becomes yet another attraction for the tourists, their visit to the cluster becomes a business opportunity for the silk cluster. But the problem lies in the conversion of the tourists as customers. While the cluster offers a product of snobbish value, the tourists look in for low cost items, which their purses could afford. They get either bowled over by the high prices of the original silk sarees and go empty handed or end up with a fake saree by getting misled by avaricious brokers. Since the raw material cost is skyrocketing and the weavers are refusing to weave simpler varieties fearing loss of wages, the cluster is at a tight corner in terms of wooing tourists as customers.

Extensive technical, market and competitive information accumulates within a cluster and members have preferred access to it. In addition, personal relationships and community ties foster trust and facilitate the flow of information. These conditions make the information more transferable (Porter 1998). The channel members like suppliers of raw materials, sub-contracting agents, customers, competitors and technical/support institutions serve as the main sources of market information/services.

### **Role of Government in promoting competitiveness**

In continuing the debate over the competitiveness of clusters, no topic engenders more argument or creates less understanding than the role of the government. Many see government as an essential helper or supporter of industry, employing a host of policies to contribute directly to the competitive performance of strategic or target industries. Others accept the “free market”

view that the operation of the economy should be left to the workings of the invisible hand.

Both the views are incorrect. Either, followed to its logical outcome, would lead to the permanent erosion of a cluster's competitive capabilities. Government's proper role is as a *catalyst* and *challenger*, it is to encourage - or even push - companies to raise their aspirations and move to higher levels of competitive performance, even though this process may be inherently unpleasant and difficult. Government cannot create competitive industries; only companies can do that. Government plays a role that is inherently partial, that succeeds only when working in tandem with favourable underlying conditions in the diamond. Still, government's role of transmitting and amplifying the forces of the diamond is a powerful one. Government policies that succeed are those that create an environment in which companies can gain competitive advantage rather than those that involve government directly in the process, except in nations early in the development process. It is an indirect, rather than a direct, role.

The strategies for the government can thus be like - stimulating early demand for advanced products, confronting industries with the need to pioneer frontier technology through symbolic cooperative projects, establishing prizes that reward quality, and pursuing other policies that magnify the forces of the diamond of competitiveness. But the major flaws that happen are attempting to manage the industry structure, protecting the market too long, and yielding to political pressure to insulate inefficient retailers, farmers, distributors, and industrial companies from competition. This may be due to the reason that competitive time for companies and political time for governments are fundamentally at odds. It often takes more than a decade for an industry to create competitive advantage; the process entails the long upgrading of human skills, investing in products and processes, building clusters, and penetrating foreign markets. Consequently, most governments favour policies that offer easily perceived short term benefits, such as subsidies, protection, and arranged mergers-the very policies that retard innovation. Deregulating a

protected industry, for example, will lead to bankruptcies sooner and to -stronger, more competitive companies only later.

Porter prescribes some basic principles that governments should embrace to play the proper supportive role for national competitiveness: encourage change, promote domestic rivalry, and stimulate innovation. Some of the specific policy approaches to guide nations seeking to gain competitive advantage include the following:

- ◆ Focus on specialized factor creation
- ◆ Avoid intervening in factor and currency markets
- ◆ Enforce strict product, safety, and environmental standards
- ◆ Sharply limit direct cooperation among industry rivals
- ◆ Promote goals that lead to sustained investment
- ◆ Deregulate competition
- ◆ Enforce strong domestic anti-trust policies
- ◆ Reject managed trade.

Though the cooperative movement has been a grassroots born initiative in Kanchipuram silk cluster, there has been a dominant presence of government in the industry. Policies initiated well with the welfare motive of protecting the interest of weavers, there has been an extra dosage of protectionist attitude towards the industry. The whole of cooperative segment of the industry is being managed by the government, which implies that the industrial structure is under its control. The role of government has predominantly been a “supporter” or “helper” of the industry. This has resulted in long term protectionism, politicization, insulation of inefficient retailing from private competitors, etc.

The wage structure, which was fixed at a higher rate with a welfare attitude towards weaver, has now loomed up to be a major constraint for the much needed product diversification in the cluster. The weavers have developed an antagonism towards product modification or diversification for the fear of loss in wages.

The refinancing, cash credit and subsidy support for the cooperatives instead of boosting their position has bred inefficiency in most cases. Even a

glance at the nomenclature of the Cooperatives can suggest even a lay man about the degree of politicization of the cooperatives. The proximity enjoyed by the handloom sector in the minds of politicians, has perhaps worked the other way, since each wanted to name a cooperative society reflecting their loyalty to their political leaders. The worst part is the danger of receiving a step-motherly treatment to those cooperatives, which were initiated by the opposition party.

While taking a look at the organizational structure of the cooperatives it could clearly be observed that there is a high degree of red-tapism as the legacy of bureaucratic structure of decision making, nourished at the cost of efficiency of the cooperatives. Though all the societies are headed by separate Special Officers, they reported to the single authority - Deputy Director (Handlooms), who in turn is controlled by the apex Directorate of Handlooms located at Chennai. While the policy decisions could wait, market-related decisions also unfortunately wait for approval from the helm, which descends at a date, when it becomes too late to react. While the private counterparts, make decisions rapidly and tap the 'first-mover' advantage, the cooperatives stand to lose. At times the decisions taken at the helm are incongruent with that of ground realities. This mismatch also lands on the efficiency of cooperatives.

Porter argues that intervention of government in the factor market is often counter productive. The point is not that government should pursue policies that intentionally drive up factor costs or exchange rate; government should resist the temptation to push them back down. In the case of Kanchipuram silk cluster, there is a regular intervention by the government into the factor market. It is more in terms of welfare orientation and preventing the exploitation of weavers by the masters. The government has established the cooperatives with a bench mark wage structure and brings standards into the factor conditions of the cluster. It also becomes essential for such interventions, since the attrition rate among the weavers is on the rise due to the reduced earnings. But it is also a fact to be accepted that though the wages in Cooperatives are higher, the duration of employment is lesser when

compared to that of the private sector. This suggests that left to market forces and playing a regulatory role shall be a better bet.

Recently, the wage negotiations in the state government constituted committee-[with the District Collector, District Labour Welfare Officer, representatives from traders (master weavers) association and representatives of labour unions] proved to be a futile exercise with the stakeholders taking tangent stands. This was followed by a difficulty in implementation of the proposed wage revision on a large-scale disagreement by the private master weavers.

**Focus on □□□□□□□□□□ factor creation:**

In order to create a competitive advantage it becomes essential for the government to initiate/run mechanisms such as specialized apprenticeship programmes, research efforts in universities connected with an industry, trade association activities, and most important, the private investments of companies ultimately create the factors that will yield competitive advantage.

Porter suggests that under certain limited conditions, cooperative research can prove beneficial, especially projects in the areas of basic product and process research, not in subjects closely connected to a company's proprietary sources of advantage. They should constitute only a modest portion of a company's overall research program in any given field. Cooperative research should be only indirect, channeled through independent organizations to which most industry participants have access. Organizational structures, like university labs and centres of excellence, reduce management problems and minimize the risk to rivalry. The most useful cooperative projects often involve fields that touch a number of industries and that require substantial R&D investments.

In this direction there have been substantial initiatives from the side of government. The Ministry of Textiles and Handlooms, Government of India has instituted two important institutions viz. Central Silk Board (CSB) [Silk Conditioning and Testing House (SCTH)] to deal with the macro issues on product quality and research on production technology and Weavers Services



Centre (WSC) for dealing with micro level issues of training the weavers, designing and dyeing. Accordingly, the CSB works closely with master weavers and Anna Silk Exchange, and the WSC with the weavers.

The WSC develops designs and performs research on dyes, disseminates knowledge through training. The CSB through its SCTH assists the cluster by standardization of yarn quality, acts as a conduit for dissemination of technology developed through research by the Central Silk Technology and Research Institute (CSTRI) to the cluster. One of such recent introduction is that of the 'steam dyeing' technology which comes with a subsidy component. Currently CSB is working on issues to enable export of silk fabrics. The CSB also is planning to launch a zari testing facility, which shall be a step ahead in terms of presently available technology.

#### Deregulate Competition;

Regulation of competition through such policies as maintaining a state monopoly, controlling entry into an industry, or fixing prices has two strong negative consequences: it stifles rivalry and innovation as companies become pre-occupied in dealing with regulators and protecting what they already have; and it makes the industry a less dynamic and less desirable buyer or supplier. In the case of Kanchipuram cluster, the state intervenes in the areas of price fixation for raw materials viz., silk yarn (at the Anna Silk Exchange) and zari (through the Centralised Purchase Committee). But these are carried out with the main objectives of regulating the instability of prices and streamline the input prices to protect the industry by reducing uncertainty. In the case of traditional and dwindling industries like that of handloom such interventions become inevitable. It should also be noted that mere deregulation and privatization on their own, however, will not succeed without vigorous domestic rivalry - and that requires, as a corollary, a strong and consistent antitrust policy.

## **The Company Agenda**

The recent intervention of textile retail majors like Pothys, The Chennai Silks, RmKV, etc., has increased the pressure for innovation in the cluster. Due to the intensive branding and sales promotion campaigns by these textile retail majors, the traditional cluster had to rethink its offerings and make suitable changes in the product to face the competition [See Case study - Branding P(l)ays...], The product differentiation is predominantly based on introduction of thematic designs, attractive colour combinations and value addition through embroidery/crystal work, etc. In line with such market developments, the Cooperative sector has also geared up by creating a new range of silk sarees called '*Kodai Pookal*' collection, featuring exclusive designs created by National Institute of Design (NID). Also Co-optex has planned to upgrade the cluster products making it more suitable for export.

Computer Aided Design has received a wide level of acceptance among the cluster members. A few cooperatives like Thiruvalluvar and Anna Society have installed computerized designing and punch card manufacture facilities which reflect their preparedness to face growing competition. Given the volume of support that the cooperatives enjoy through their networking with government based technical and research institutions like CSB, WSC, IIHT, NID, etc., they can adopt pro-active strategies by establishing early warning systems. Presently they adopt only reactive strategies.

The field level personnel must be consulted for market planning. Intensive market research must be obtained from personnel serving at the retail outlets. Though some of the branches are located at prominent places due to lack of advertisement, they are unable to attract customers, hence the advertising budget has to be enhanced. If this is not possible through cooperatives on their own, then through the schemes like Market Development Assistance, allotments can be made for 'Loom World' and common advertising can be done for the cooperatives.

The list of customers can be made from the receipt books, analysis can be done on the geographical location of customers, based on which promotional measures can be initiated. Promotional mails to regular customers offering special discount coupons shall prove useful.

Leadership plays a vital role in boosting the competitiveness of a company. Cooperatives are no exception to this. Hence, dynamic personnel with a good marketing skill and experience should be employed to make the efforts a success. Professional managers must be appointed at the helm to manage the affairs. Introduction of sales performance linked incentive scheme in the Cooperatives shall motivate the personnel. Unprofitable sales outlets can be merged with Loom World outlets or shall be closed to reduce losses.

Product lines have to be identified for each Cooperative and they can specialize in particular product line. Unprofitable/stagnant product lines have to be shunned.

Linkages with Co-optex can be strengthened and incentives to the sales agents in the form of extended credit period, discounts and awards/recognition shall be helpful in strengthening the linkages. Also, monitoring of shelf-space/window display for Kanchipuram silk by the authorized agents in their showrooms (as done in the case of pharmaceutical products) shall help in increasing the visibility of the product among the customers.

In the case of private firms, steps must be taken to strengthen their linkages with that of existing institutions. They must be included in the cluster development initiatives. Export must be encouraged among the private sector firms by providing them necessary guidance and support. Financial assistance has to be arranged for the private firms to enable them to utilize opportunities like 'apparel parks' etc. The linkages among Traders Associations with Government agencies must be strengthened to promote the overall competitiveness of the cluster.

### **Promoting the Competitive Advantage Differences**

Clusters are characterized by the diverse structures of firms, presence of intense rivalry among the cluster firms and the strategy that each firm adopts to boost its competitive advantage. In the Kanchipuram silk cluster too this phenomenon exists. A large number of weavers are dependent upon the Cooperatives in this cluster and the welfare of weavers is the prime motto of these Cooperatives. The weavers attached to Cooperatives enjoy the benefits of fair wages, bonus, cash advances, housing, insurance, etc. Thus to ensure the well-being of these weavers, it is essential to promote the competitive advantage of Cooperatives and help them reap higher profits. A focused analysis on specific criteria can alone yield the desired results. It is essential to analyze the major differences between the competitive advantage of Cooperatives and their private competitor firms, to evolve specific strategies that can boost their competitive advantage.

An attempt has been made in this section to analyze the competitive advantage differences that exist among the private firms and Cooperatives in the Kanchipuram Silk Cluster. Since all the Cooperatives function under a single agency control i.e., Directorate of Handlooms & Textiles, they have been collectively considered as a firm. These Cooperatives have been juxtaposed with the private firms in the cluster, on four important factors that affect the competitive advantage viz., Technology, cost, quality and service to evaluate the strategic position and suggest strategies for improving the competitive advantage of Cooperatives. The scoring has been allotted on a ten point scale for each factor for both Cooperatives and private sector players. For each factor the scores have been allotted for the standing of cooperatives and their competitors, importance of improving the standing has been specified, the affordability and speed of the cooperatives have been analyzed, the competitors' ability to improve their standing has been notified and the suitable actions have been recommended. The table 6.5 presents the comparison of competitive advantage differences that prevail between the Cooperatives and Private Sector players in the Kanchipuram Silk Cluster.

**Competitive Advantage Differences - Private Sector vs. Cooperatives\***

Competitive Advantage (1)	Company Standing (2)	Competitor Standing (3)	Importance of Improving Standing (H-M-L) (4)	Affordability & Speed (H-M-L) (5)	Competitors Ability to improve standing (H-M-L) (6)	Recommended Action (7)
Technology	6	8	High	Low	Medium	Invest
Cost	6	8	High	Low	Medium	Monitor
Quality	8	6	Low	Low	Medium	Hold
Service	4	8	High	High	High	Invest

\* Scale adopted Kotler (1999).

**Technology;**

In terms of technology, though the Cooperatives had access to various technical institutions like CSB, WSC, IGCAR, etc., they lag behind the private players. Recently due to the intervention of the Chennai-based textile retail majors like Chennai Silks, Pothys, Kumaran, RmKV, recent technology gets easily transferred through the private master weavers. Even in the case of computerization of designing, the adoption rate has been very low in the case of Cooperatives. Only a couple of the cooperatives have switched to this new technology. Due to the structural, financial and functional limitations, the Cooperatives are unable to keep pace with the rapid changes in technology. Even among the private firms in the cluster, only a few can afford to invest in new technology but their contacts with external agencies helps them gain access to new technology. Hence the Cooperatives need to '*invest*' more in terms of technology and they can fare better by utilizing their linkages with CSB and WSC properly.

**Cost:**

The cost at which the Cooperatives operate is higher than that of the private players because of their larger size, higher cost of wages and material and political and bureaucratic structure. Most of the Cooperatives function with a bulky size of organization which many a times is not commensurate with their business volume. Due to the accumulation of stock they are forced to offer high

rates of discount on products which eats up their margins. The bureaucratic structure and political influences thrust decisions upon these cooperatives which results in a higher cost. Moreover, the centralised decision making for all the cooperatives at the Directorate may not be suitable for all the cooperatives which differ in sizes and volume of business. Due to all these reasons the Cooperatives incur a higher cost than their private competitors. Hence the strategy suggested is to '*monitor*<sup>3</sup> the cost.

**Quality:**

Cooperatives are perceived as the synonyms of quality. This quality image of the cooperatives is much higher than that of the private firms. The silk fabrics from the houses of Cooperatives are original and are of a superior quality than many other private players. Due to the usage of original materials the price of their products are also normally higher than that of private firms. Since they were quite confident about their product quality, the Cooperatives were supportive for the installation of zari testing mechanism in the cluster. The cooperatives having scored higher than their competitors in terms of quality the strategy recommended is '*Hold*' i.e., to maintain the quality standards.

**Service:**

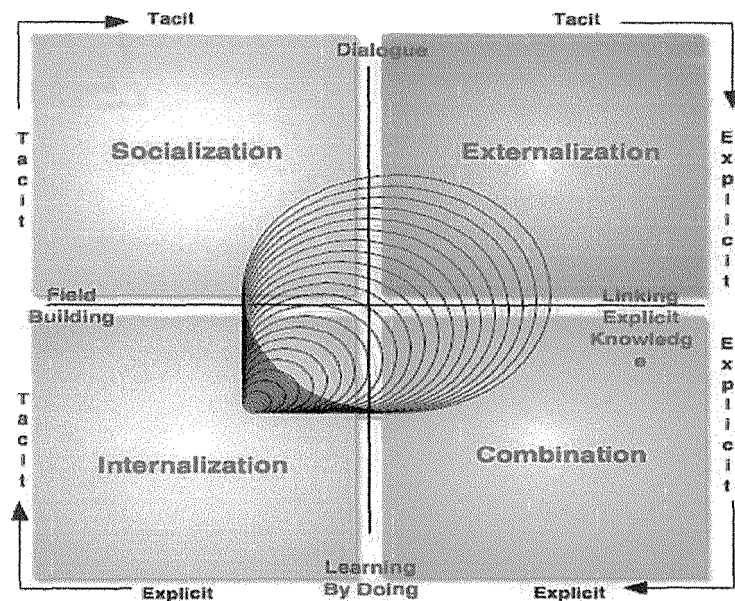
Customer orientation and service tops the priority in any consumer-oriented product. The service offered by the seller at times overlooks the actual product being sold, since it impacts the customer immediately. The Cooperatives have scored lesser in terms of service, since the private firms perform much better in this arena. The private firms offer a better range of products for choice and aim to give the customer a satisfactory shopping experience. But cooperatives do not concentrate much on these fronts. They have a restrictive budget and even for smaller things like offering refreshment for a customer it becomes a difficulty. Hence there is a dire need for cooperatives to concentrate on this aspect and they need to '*invest* efforts and money to improve their service delivery mechanism.

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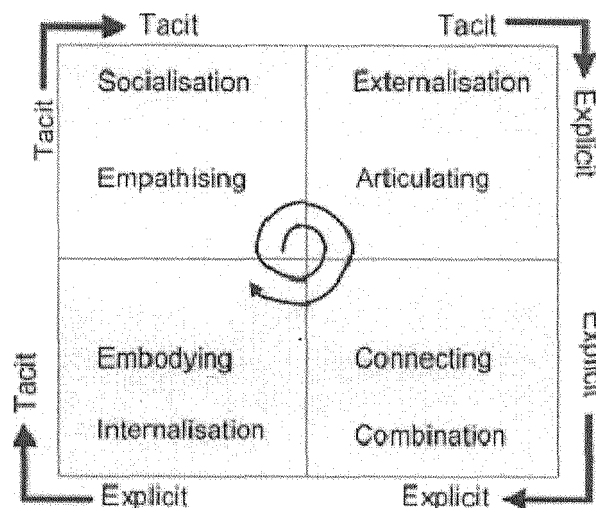
Nonaka (1994) theorized that the creation of knowledge is the result of a continuous cycle of four integrated processes: externalization, internalization, combination, and socialization. These four knowledge conversion mechanisms are mutually complementary and interdependent that change according to the demands of context and sequence:

At the heart of Nonaka's work is the premise that there are two types of knowledge: tacit and explicit. *Tacit knowledge* is subjective and experience based knowledge that can not be expressed in words, sentences, numbers or formulas, often because it is context specific. This also includes cognitive skills such as beliefs, images, intuition and mental models as well as technical skills such as craft and knowhow. *Explicit knowledge* is objective and rational knowledge that can be expressed in words, sentences, numbers or formulas (context free). It includes theoretical approaches, problem solving, manuals and databases. Nonaka models knowledge transfer as a spiral process. Start with a 2x2 matrix, in which existing knowledge can be in either form - tacit or explicit - and the objective of knowledge transfer can be to convey either tacit or explicit knowledge. Each mode of transfer operates differently.

### The Knowledge □□□□□□



- **Externalization** - from Tacit to Explicit: Converting tacit knowledge explicitly through the use of such techniques as metaphors and models.
- **Combination** - from Explicit to Explicit: Manipulating explicit "systemic" knowledge through such techniques as sorting and combining. For this to occur, the knowledge elements must "fit together."
- **Internalization** - from Explicit to Tacit: This is "learning by doing" (operational knowledge) and sharing mental models and technical know-how.
- **Socialization** - from Tacit to Tacit: Sharing experiences with others (sympathized knowledge). Example: It is quite resistant to codification.



The SECI Model of Knowledge Creation  
Source: Nonaka, 1994.

Each type of knowledge can be converted. When viewed as a continuous learning process, the model becomes a clockwise spiral; organizational learning depends on initiating and sustaining the learning spiral. (The model is a spiral, not a cycle, because as one “learns” around the cycle, understanding moves to deeper and deeper levels.)

The process that transfers tacit knowledge in one person to tacit knowledge in another person is *socialization*. It is experiential, active and a



“living thing,” involving capturing knowledge by walking around and through direct interaction with customers and suppliers outside the organization and people inside the organization. This depends on having shared experience, and results in acquired skills and common mental models. Socialization is primarily a process between individuals.

The process for making tacit knowledge explicit is *externalization*. One case is the articulation of one’s own tacit knowledge - ideas or images in words, metaphors, analogies. A second case is eliciting and translating the tacit knowledge of others - customer, experts for example - into a readily understandable form, e.g., explicit knowledge. Dialogue is an important means for both. During such face-to-face communication people share beliefs and learn how to better articulate their thinking, through instantaneous feedback and the simultaneous exchange of ideas. Externalization is a process among individuals within a group.

Once knowledge is explicit, it can be transferred as explicit knowledge through a process Nonaka calls *combination*. This is the area where information technology is most helpful, because explicit knowledge can be conveyed in documents, email, data bases, as well as through meetings and briefings. The key steps are collecting relevant internal and external knowledge, dissemination, and editing/processing to make it more usable. Combination allows knowledge transfer among groups across organizations.

*Internalization* is the process of understanding and absorbing explicit knowledge into tacit knowledge held by the individual. Knowledge in the tacit form is actionable by the owner. Internalization is largely experiential, in order to actualize concepts and methods, either through the actual doing or through simulations. The internalization process transfers organization and group explicit knowledge to the individual.

### **Transfer of knowledge in clusters for competitiveness**

Extensive technical, market and competitive information accumulates within a cluster and members have preferred access to it. In addition, personal relationships and community ties foster trust and facilitate the flow of

information. These conditions make the information more transferable (Porter 1998). The channel members like suppliers of raw materials, sub-contracting agents, customers, competitors and technical/support institutions serve as the main sources of market information/services.

### **Aspects of Knowledge Transfer □□ the Kanchipuram Cluster**

The art of weaving will have to be learnt by working on the loom. Seldom is any formal course in vogue to train people in such skills. Though weaving techniques are codified by agencies like Central Silk Technology and Research Institute (CSTRI), Central Silk Board (CSB), Weavers Service Centre (WSC), the nuances still remain *tacit* at the cluster level. Hence *socialization* becomes □□□ major method of knowledge transfer. The knowledge thus gained through socialization by continuous practice of the art on the loom gets strengthened through the process of *internalization*.

### **Transfer of the Basic Knowledge on the art of weaving:**

The child in a weaver's house plays with the weaving implements, learns spinning at the tender age of five, starts sitting on the loom from the □□□ of seven and becomes a full fledged weaver at the end of its teens. On the other hand, a worker who joins the loom for a wage, by the passage of time through the process of socialization and observation, learns the art and becomes a full fledged weaver over a period of time. Thus the art is learnt □□ a □□□ of life.

This fact is also reflected in the study. While most of the weavers of Kanchipuram Silk Cluster have acquired their basic training in weaving from their family and the rest have begun their career as workers in looms and have graduated to be weavers of their own at a later period of time (table 5.6).

Not only the art of weaving but management of the looms and marketing also have to be learnt on the job. While the child in a weaver's house plays with the weaving implements, the child of a master weaver / retailer learns by observation the nuances of choosing the right stuff for marketing, accompanies the father to the looms and learns the management part, starts sitting in the showroom from the age of seven and becomes a full fledged master

weaver/retailer at the end of its teens. Thus, by the passage of time through socialization and observation, knowledge is acquired as a way of life.

This fact is also reflected in the

Only in a very few occasions the cluster members approached the external agencies like Central Silk Board, Weavers Service Centre, etc., in order to gain technical inputs. These institutions through their training programmes predominantly through the strategy of *combination* transfer their knowledge.

#### **Transfer of Knowledge about market:**

This is an arena where different external agencies come into play. The channel members like suppliers of raw materials, sub-contracting agents, customers, competitors and technical/support institutions serve as the main sources of market information/services. Product diversification is a potential area where dynamic knowledge transfer occurs.

Though there are different sources from which support for diversification arrives, the nature of support may range from mere provision of information to supply of materials and technical support. While the cooperatives provide complete support for product diversification from provision of design to technical support, the private master weavers restrict themselves only to a few areas like provision of design (Chapter 5 - table 5.24).

It could also be observed that the weavers have received support in the form of supply of design and materials required for diversification followed by complete support for product diversification viz., materials to be used, technical knowhow, designs, market information, advice on equipments to be used, processes to be adopted etc., from Cooperatives in which they are enrolled as members (Chapter 5 - table 5.25).

Provision of market intelligence was the major service rendered by the channel members in the cluster followed by provision of design inputs. With the geographical proximity and focus on the same market, the transfer of market intelligence happens easily in the Kanchipuram cluster.

The masterweavers/retailers of the cluster (vide table 5.40) depended upon the local technical and R&D institutions like Central Silk Board and Weavers Service Centre for product diversification, followed by sub-contracting large textile houses like RmKV, Pothys, Chennai Silks, etc. Skilled employees and fellow master weavers/retailers also helped in transfer of knowledge on product diversification. Agencies like CSB/WSC provided support in the form of training required for diversification and also supplied inputs on designs and new technology [vide table 5.41],

Some master weavers also have undergone training in dyeing technology and improved looming technologies at CSB (Annexure 2 - Case studies 2 & 8).

#### **Threats to the Knowledge transfer:**

Though the formal knowledge transfer occurs from external agencies through training programmes, the occasions are few and the *internalization* does not occur as expected due to financial and attitudinal constraints.

The younger generation of weavers is almost away from this art (Chapter 5 - table 5.2) since the profession is not lucrative. This endangers not only the survival of the trade but also the knowledge of the art of weaving.

Efforts must be initiated to preserve the extinction of this art by boosting the competitiveness of the industry. Usage of information technology tools is essential for making the knowledge transfer process more effective. The efforts towards strengthening of linkages among the cluster stakeholders shall help in facilitating the process of knowledge transfer in the cluster thereby help boost the competitiveness of the cluster.

From the analysis of the cluster linkages it could be observed that the linkages of principal firms with the BDS providers are weak. There are also issues which call for attention from policy perspective like regulation of

competitor!, creation of a conducive environment for business, etc. □□□□ regard to the promotability aspect, there is a need for product diversification which is □□□□□□□□ □□□□ when □□□ □□□□□□□□ among the stakeholders □□□ strengthened. The cluster cooperation matrix has identified potential areas for development of linkages and social capital. The analysis of competitive advantage differences reveals that among Cooperatives, there is a need to invest in technology □□ □□□□ as services and monitor cost. The diamond of competitive advantage analysis has indicated the various areas of concern for developing the competitive advantage of the cluster. The analysis of knowledge management has highlighted the issues in knowledge transfer, the need to preserve the knowledge and the strategies for facilitating transfer of knowledge.

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## Chapter 7

### **ANALYSIS OF CLUSTER LINKAGES: A PARTICIPATORY APPROACH**

Participatory Rural Appraisal (PRA) is a growing family of approaches and methods to enable local people to share, enhance and analyse their knowledge of life and conditions, and to plan, act, monitor and evaluate. PRA is a quick method of gathering information about communities and localities. It is based on the principle that “how people interpret their own situations”. PRA techniques help in understanding the perceptions of the community on development and pave way for devising need-based development projects. It is basically ‘people-driven’, since the people who are studied decide the nature of the development they require. This is a semi-structured approach to analyzing specific social situations.

The various techniques of PRA include

- Timeline analysis
- Social mapping
- Transect
- Resource Mapping
- Seasonal calendar
- Venn diagram analysis
- Trend Analysis and
- Mobility Map.

In this study three of these techniques have been utilized viz., timeline analysis (Chapter 3 - Kanchipuram Silk Cluster through ages section), seasonal calendar and venn diagram analysis. Focused Group Discussions with the various stakeholders were organized to enunciate information from them on these aspects.

#### **Seasonal Calendar:**

It is a calendar of the people which provides a trend in the main activities, problems and opportunities of a community through the annual , cycle.

## Seasonal Activity Calendar

■Month	Tamil Month	Festivals/Occasion	Activity
January	Marghazhi/Thai	Pongal / Marriage month (Thai)	Weaving activity intensifies on the anvil of auspicious months for marriage and harvest festival 'Pongal'.
February	Thai/Masi	Marriage months	Intensive Weaving activity with a view to cater to the demand of continuous months considered auspicious for wedding
March	Masi/Panguni	Marriage months	Intensive Weaving activity with a view to cater to the demand of continuous months considered auspicious for wedding
April	Panguni/Chithirai	Marriage months/ Tamil New Year	Intensive Weaving activity with a view to cater to the demand of continuous months considered auspicious for wedding
May	Chithirai/Aaikasi	Marriage months	Lesser Arrival of Silk yarn due to hot climate; Intensive Weaving activity with a view to cater to the demand of continuous months considered auspicious for wedding
June	Vaikasi/Aani	Marriage months	Lesser Arrival of Silk yarn due to hot climate; Intensive Weaving activity with a view to cater to the demand of continuous months considered auspicious for wedding
July	Aani/Aadi	Marriage month (Aani)	Moderate weaving activity with commencement of popular 'Adi' clearance sale
August	Aadi/Aavani	Marriage month (Avani)	Closure of clearance sale and Intensive Weaving Activity for the demand arising for the forthcoming marriage months
September	Aavani/Purattasi	Marriage months	Intensive Weaving Activity to meet with the demand
October	Purattasi/Aippasi	Marriage months/ Diwali	More Silk yarn comes to the market/ Rains Affecting intensive weaving activity
November	Aippasi/Karthikai	Marriage months/ Karthigai Deepam - Lamp festival	More Silk yarn comes to the market/ Rains Affecting intensive weaving activity
December	Karthikai/Marghazhi	Marriage month (Karthigai)	Slow withdrawal of rains and resumption of weaving activity.

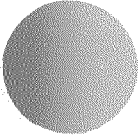

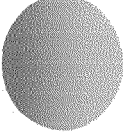
## Venn diagram analysis

It is a visual depiction of key institutions, organizations and individuals and their relationship with the local community or other groups. In the Venn diagram size of the circle represents the significance or power or indispensability of the institution. The centre core ring houses the community under study. There are three concentric rings surrounding the score indicating the level of proximity with the core. The farther an institution is placed from the core determines its level of proximity, accessibility and linkages with the community.

In short, Venn diagrams serve the following purposes:

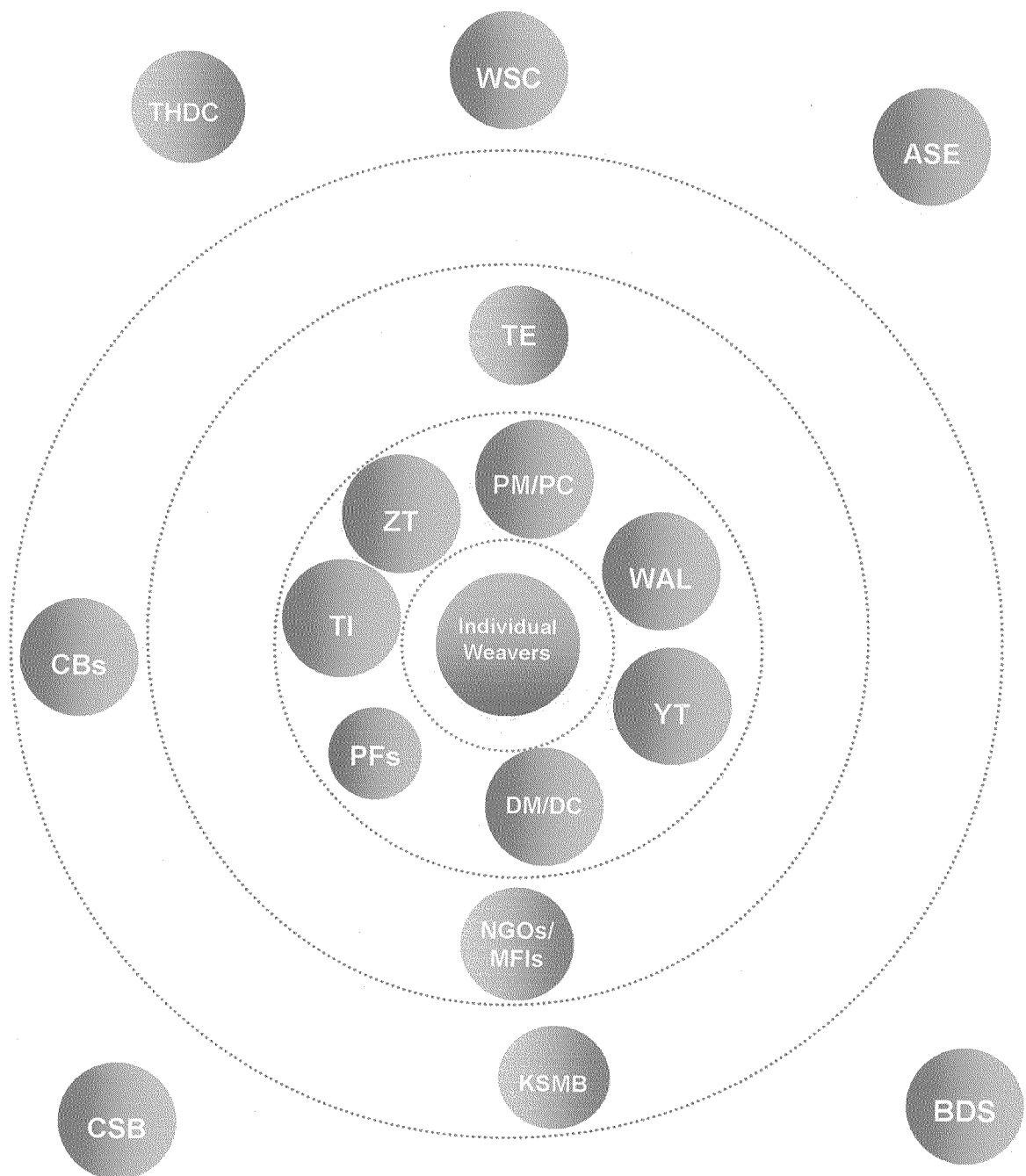
- The roles and significance of various institutions to the people
- Levels of communication between an organization
- The role of project bodies and their intervention
- Improving the missing link between existing organizations
- Potential for working through existing organizations
- Potential roles for new organizations

In this study, the following symbols have been used in the Venn diagram analysis, to represent the different categories of institutions

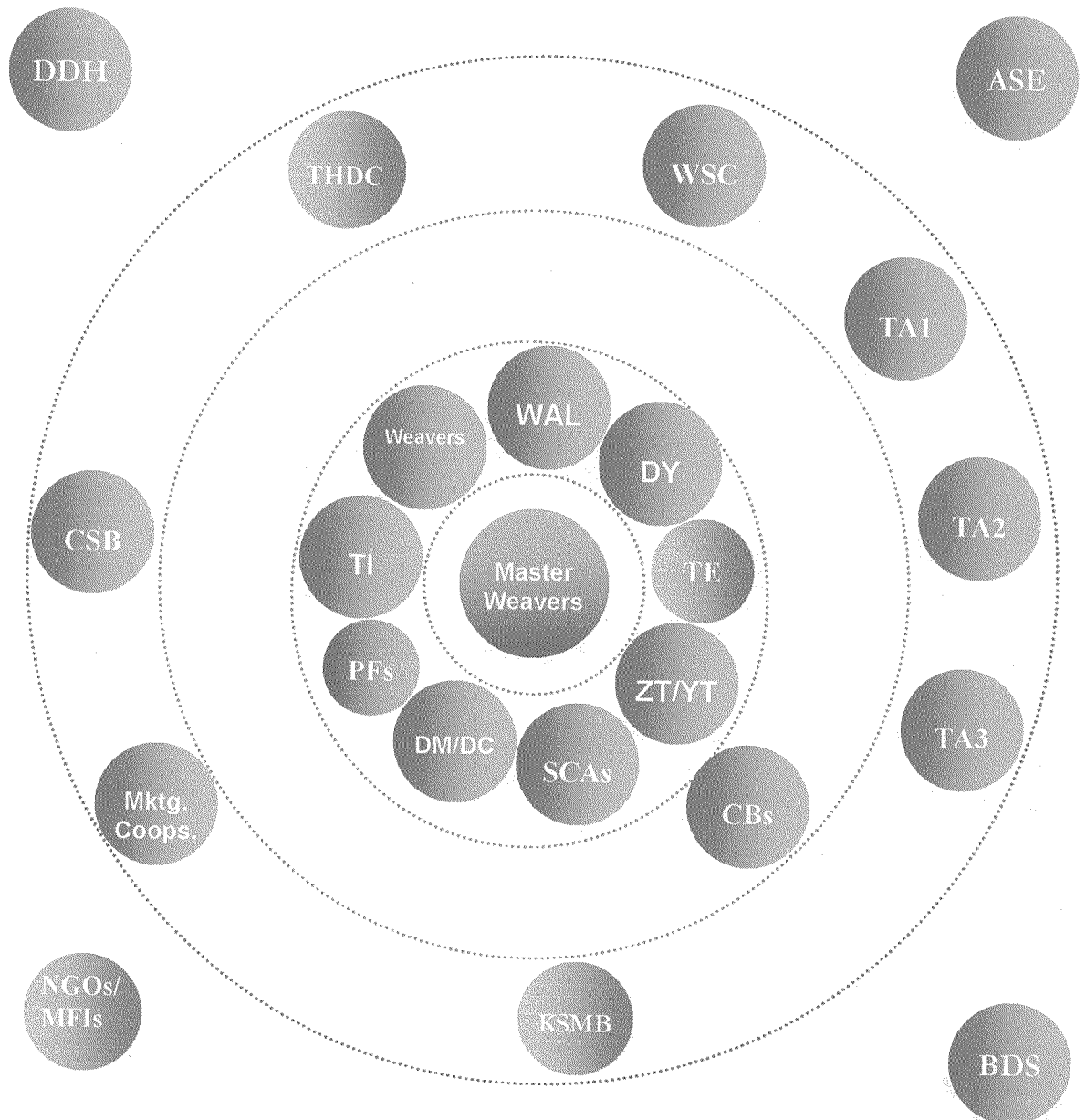
Symbol	Meaning
	Institutions that are most important
	Institutions that are moderately important
	Institutions that are less important



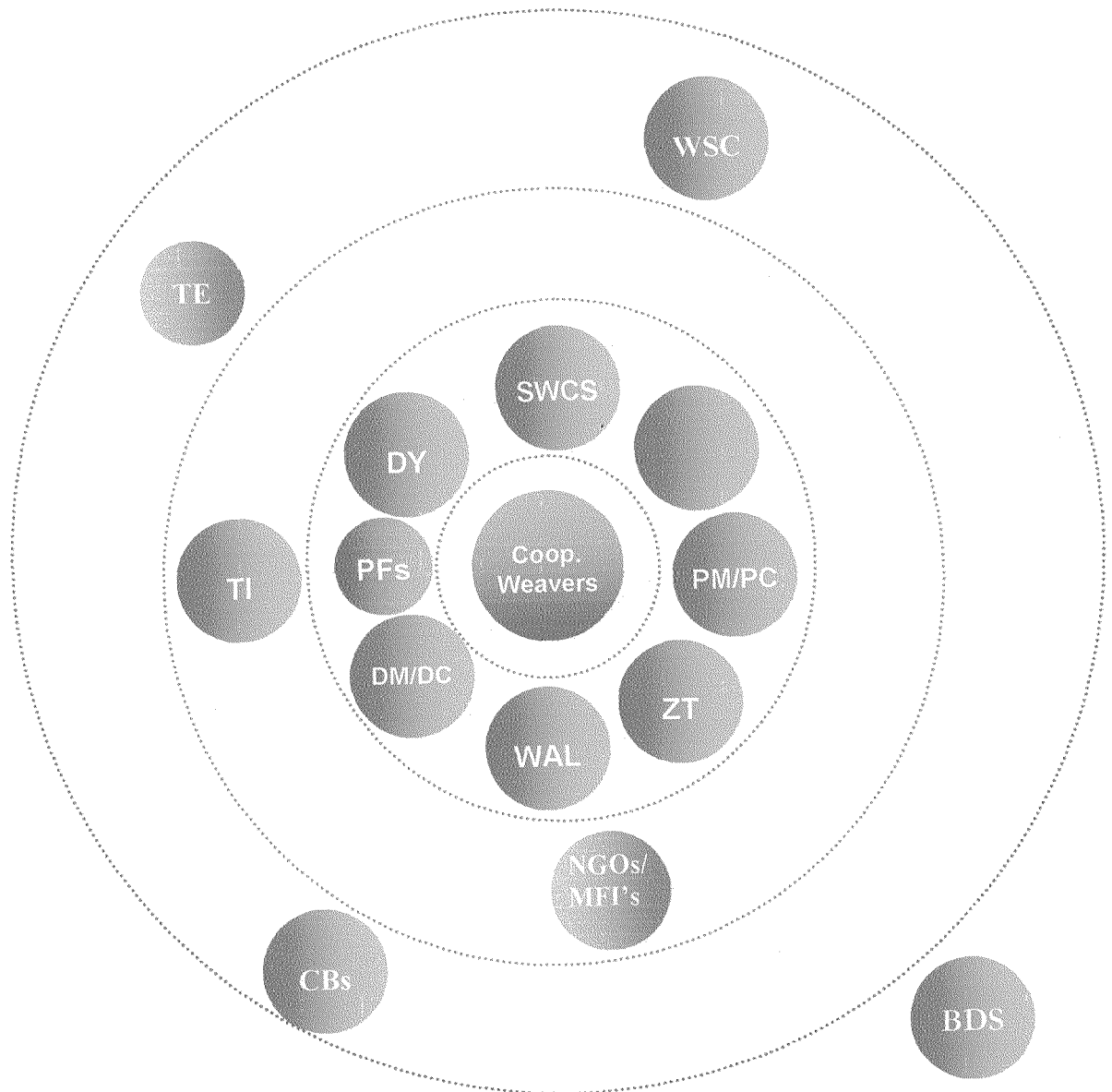
**Fig 7.1**  
**Venn diagram Analysis for the Individual Weavers**



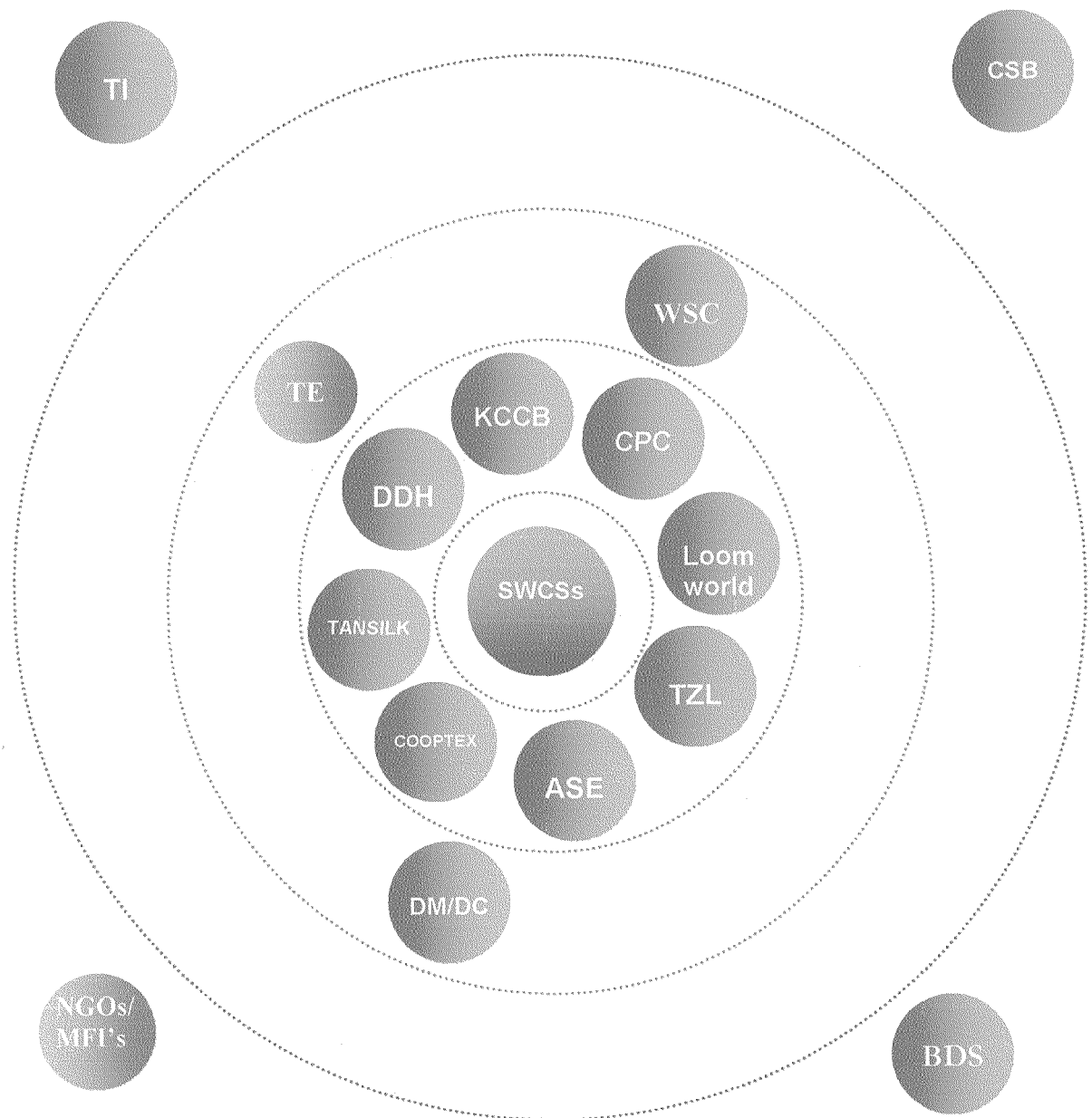
**Fig.7.2**  
**Venn diagram Analysis for the Master Weavers**



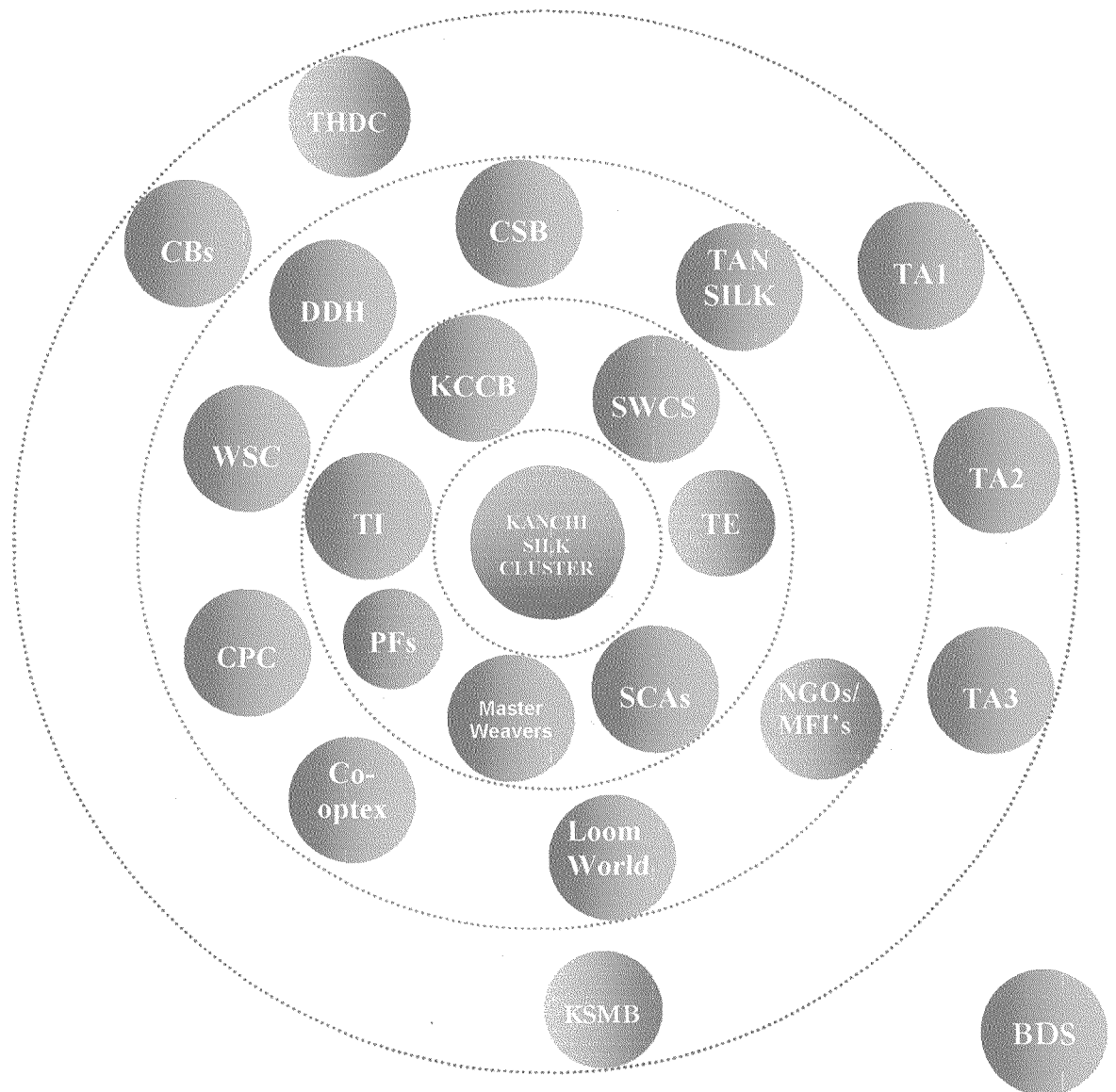
**Fig 7.3**  
**Venn diagram Analysis for the Cooperative Weavers**



**Fig.7.4**  
**Venn diagram Analysis for the**  
**Silk Weaver Cooperative Societies**



**Fig.7.5**  
**Venn diagram Analysis for**  
**the Kanchipuram Silk Cluster as a whole**



## Venn diagram Analysis - What do the **pictures** convey?

### **Individual Weavers:**

In the case of individual weavers, the important agencies like Tamilnadu Handloom Development Corporation (THDC), technical agencies like Weavers Service Centre (WSC) and Central Silk Board (CSB), and agencies that provided Business Development Services (BDS) were found outside the third circumference, which means that these agencies though present in the cluster had very less contact with the individual weavers. The Commercial Banks were found in the outermost ring, since these banks do not prefer lending to the weavers, due to higher rates of default and if at all they lent, it was based on mortgage of jewel or property, which was normally auctioned due to default in repayment. The Karnataka Silk Marketing Board (KSMB) was placed in the outermost ring since all the individual weavers, were not procuring their yarn from there. The external trade houses in , Chennai and NGOs/MFIs occupied the middle ring, since they were helpful in marketing and financing, on occasions for the individual weavers. The innermost ring was occupied by the channel participants like local yarn/zari traders, designers, dyers, weaving appliance suppliers, retailers, design punch card manufacturers and private financiers. This proximity was because of the regular interaction and interdependence in terms of trade. The proximity of private financiers, who lent at exorbitant rates of interest strikes a note of caution and indicates a need for intensive microfinance campaign among the individual weavers.

### **Weavers attached to Cooperatives:**

In the case of weavers enrolled with cooperatives, it was pure dependency on the cooperatives, since their production, credit, marketing and welfare requirements were taken care of by their cooperative society. But, in most cases they did not weave exclusively for cooperatives, hence they had business relations with channel partners like local yarn/zari traders, designers, dyers, weaving appliance suppliers, design punch card manufacturers and private financiers. The contacts with retailers were not regular, since they manufactured for them occasionally, hence they had been placed in the

middle ring; also the MFIs which were now growing as an important alternative means of finance among these group of weavers find a place here. The commercial banks that lent money to these weavers on pledging some asset, the external traders to whom they supplied goods occasionally and WSC where some weavers had undergone training were found in the outermost ring.

**Master Weavers:**

In the case of master weavers, apart from the local channel participants, external traders and subcontracting agencies were found to be in the proximity ring. Chennai based textile retail majors like Pothys, Chennai Silks, RmKV, Kumaran, Nalli, Saravana stores, Jeyachandran, etc., turned to these master weavers for their bulk procurement. The purchase officers of these □□□□□□ houses visited the master weavers and chose attractive pieces of silk from them for their showrooms. Some of them also had established contractual relationships with some master weavers and got specific designs weaved exclusively for them. Only the commercial banks appeared in the middle ring, since they were a bit considerate with master weavers, who were considered to be better creditworthy, hence, issued them overdrafts and loans based on their stock. Even then no priority lending at a lesser rate was given for this category too. All the trader associations (silk saree manufacturers/traders association- 2 and zari merchants association -1) appeared in the outermost ring, since their roles were presently confined only to advocacy. The technical agencies like CSB, WSC, financing agency THDC, yarn supplier KSMB and Marketing Cooperatives were found in the outermost ring, since their services were utilized on and off by the master weavers, but the interactions weren't regular. The administration for . handlooms (DDH), Government Anna Silk Exchange (ASE), BDS providers and NGOs/MFIs have been placed outside the outermost ring, since their interaction with the master weavers was very limited and in some cases nil.

**Silk Weaver Cooperatives:**

Almost all the initiatives in the Kanchipuram handloom cluster were concentrated around the Cooperatives, since they were the children of the government and functioned under the administrative control of the state. This fact is also reflected in the Venn diagram, which shows the presence of major agencies like, ASE, TANSILK, Tamilnadu Zari Limited, Kanchipuram Central Cooperative Bank (KCCB), Co-optex, Loom World outlets, Centralised (Zari) Purchase Committee (CPC) and the administration in the innermost ring,

- since all of them had a defined relationship with the cooperatives as prescribed by the government. Though the cooperatives had their own designers, at times they also employed the services of external designers which had won these designers a place in the middle ring. The WSC also found a slot in the middle ring since the societies deputed their members there for training and they also procured some designs and technical inputs from them. The external traders also were found in the middle ring because, some of them were authorized sales agents of the cooperative societies and hence they procured and marketed the products of these cooperative societies. The agencies like CSB, internal traders, BDS providers and NGOs/MFIs were found outside the outermost ring since their contacts with the cooperatives were very limited and in some cases nil.

**Cluster, as a whole:**

While analyzing the cluster as a whole, the external trading houses, local retailers, master weavers, subcontracting agencies, weaver cooperatives, KCCB and private financiers were found in the core ring, establishing their prominence and strong presence/linkages in the cluster. The middle ring was occupied by government agencies like CPC, ASE, DDH, TANSILK, Co-optex, Loom world, CSB, WSC and NGOs/MFIs, since their services had reached only a section of the cluster. Funding agencies like THDC and Commercial banks, and KSMB found a place only in the outermost ring since their services have not penetrated much to the cluster. Similarly, the traders associations, limiting their role only to advocacy were found only in the outermost ring. The BDS providers were outside the third ring which is not a good indication for the competitiveness of the cluster.



### SWOT Analysis for the Kanchipuram Silk Cluster

Particulars	Current		Future	
	Strengths	Weaknesses	Opportunities	Threats
<b>Markets</b>	<ul style="list-style-type: none"> <li>- Nearness to capital city (Chennai) market</li> <li>- Capability to process small orders because of its cottage industry structure</li> <li>- Strong 'Brand image' with customers for 'Kanchipuram' Sarees</li> <li>- Traditional look preferred by the consumers</li> <li>- Dexterous craftsmanship</li> <li>- Irreplicable weaving technique</li> <li>- Increasing awareness about zari testing</li> <li>- Loom <i>World</i> initiative for cooperative sector</li> <li>- Brand creation by select cooperatives</li> </ul>	<ul style="list-style-type: none"> <li>- Production of products with limited growth prospects</li> <li>- Low productivity</li> <li>- Rapid obsolescence of products due to changing fashions</li> <li>- Lack of promotional activities</li> <li>- Repeated old patterns and designs</li> <li>- Lack of market research</li> <li>- Lack of product diversification</li> <li>- Poor marketing strategies</li> <li>- High level of ignorance about market information and market promotion strategies</li> <li>- Lack of brand building initiatives</li> <li>- Difficulty in quality control</li> <li>- Untapped local markets</li> <li>- Unhealthy price competition</li> <li>- Refusal to shift from archaic marketing modes</li> <li>- Unfair trade practices in market</li> <li>- Lack of awareness of export procedures and nuances of export marketing</li> <li>- Dearth of forward integration into garmenting</li> </ul>	<ul style="list-style-type: none"> <li>- Possibilities of acquiring technology, management know-how and marketing through sub-contracts and joint ventures</li> <li>- Possibility of exports if product diversification is done</li> <li>- Apparel park planned at Irungattukottai (40 kms away from Kanchipuram)</li> <li>- Strengthening networks with Co-optex by Cooperatives and private retail majors by master-weavers/retailers to explore export market and internationalization</li> <li>- Possibility of expanding the market of cooperatives through their agency showrooms</li> </ul>	<ul style="list-style-type: none"> <li>- Prevalence of cheaper substitutes (Arni)</li> <li>- Growing preference for synthetics</li> <li>- Unfair Market practices</li> <li>- Possibility of losing the market to big players outside the region</li> <li>- Deceptive bogus cooperatives located in proximity to the original showrooms</li> <li>- Lack of technical knowledge among the customers</li> <li>- Big players outside the cluster capitalizing the brand name</li> <li>- Absence of Business Development Services</li> <li>- Products of other origin being sold as 'Kanchipuram Silk'</li> <li>- Shifting of market towards Chennai by the retail majors</li> </ul>

		<ul style="list-style-type: none"> <li>- Reduction in demand for products due to the higher price</li> <li>- Inability to maintain uniform quality and design</li> <li>- High cost of production</li> <li>- Difficulty for external larger firms to establish sub-contractual relationships with smaller units due to difficulties in monitoring quality and adherence to delivery times</li> <li>- Lack of awareness about 'Handloom Mark'</li> <li>- Ambiguity about 'Silk Mark'</li> <li>- Geographical Indication in its initial stages</li> <li>- Lack of awareness about export procedures</li> <li>- Inability of technology to ensure uniform product quality which is a prerequisite for export markets</li> <li>- Disinterest towards exports</li> <li>- Lack of coordination among the agencies</li> <li>- Disinterested to explore new markets</li> <li>- Lack of product diversification</li> <li>- Absence of Business Development Services</li> </ul>		
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<p><b>Technology</b></p> <ul style="list-style-type: none"> <li>- Traditional knowledge</li> <li>- Strong production base</li> <li>- Availability of support services</li> <li>- Introduction of Computer Aided Designing</li> <li>- Presence of Specialized agencies like CSB in the cluster</li> <li>- Availability of technical support locally</li> <li>- Use of computerized machines for design punch cards</li> </ul>	<ul style="list-style-type: none"> <li>- Lack of varieties in cloth texture</li> <li>- Use of age old techniques</li> <li>- Poor dyeing</li> <li>- Weavers' resistance to technological change</li> <li>- Inability to maintain uniform quality and design</li> <li>- Inadequate dissemination of improved loom technologies and upgradation of pre-loom process technologies</li> <li>- Production limitations</li> <li>- Lack of integrated approach to upgrade technology</li> <li>- Lack of technology training programmes</li> <li>- Lower rate of technology adoption</li> </ul>	<ul style="list-style-type: none"> <li>- Schemes like IHTP for training the weavers</li> <li>- Effluent treatment plant being planned for the cluster</li> </ul>	<ul style="list-style-type: none"> <li>- Drawbacks in XRF zari testing</li> <li>- Lack of networking among the R&amp;D institutions like CSB and WSC and the principal production system</li> </ul>
<p><b>Inputs</b></p> <ul style="list-style-type: none"> <li>- Easy availability of raw material,</li> <li>- Use of natural yarn,</li> <li>- Availability of skilled labour</li> <li>- Presence of Weaving appliances and other related services within the cluster</li> <li>- Use of natural yarns</li> <li>- Regulation of Zari prices through Centralised Purchase Committee</li> <li>- Presence of Anna Silk</li> </ul>	<ul style="list-style-type: none"> <li>- Fluctuations in prices of raw materials and intermediate goods</li> <li>- Greater dependence on external suppliers for yarn and zari from Karnataka and Surat</li> <li>- Inability of Tamilnadu Zari Limited (a government establishment) to produce the required quantity of zari for the industry</li> <li>- Increased use of fake zari and yarn in the production process</li> <li>- Vicious role of intermediaries</li> </ul>	<ul style="list-style-type: none"> <li>- Possibility of establishing common procurement centre under cluster development scheme</li> <li>- Scaling up the capacity of TZL to produce the required zari</li> <li>- Plans of CSB to introduce an improved zari testing technology to standardize quality</li> </ul>	<ul style="list-style-type: none"> <li>- Increasing cost of silk yarn and zari</li> <li>- Increased use of fake zari</li> <li>- Strong presence of intermediaries</li> <li>- Absence of common procurement facilities for the private manufacturers</li> </ul>

	<p>Exchange and KSMB assuring the supply of quality yarn to the cluster</p> <ul style="list-style-type: none"><li>- Presence of CSB's Silk Conditioning and Testing House to test and standardize the quality inputs</li><li>- CSB and WSC advising the cluster on dyeing techniques</li><li>- Development of shade cards and design patterns by CSB and WSC</li><li>- Collaboration with National Institute of Design for development of new design patterns</li><li>- Supply of Specialized inputs by sub-contracting large textile majors like Pothys, Chennai Silks, etc</li><li>- Plan by the Tamilnadu state government to increase acreage of mulberry cultivation</li></ul>			
<b>Innovation</b>	<ul style="list-style-type: none"><li>- Adoption of Computer Aided Designing</li><li>- Product diversification</li><li>- Introduction of new</li></ul>	<ul style="list-style-type: none"><li>- Limitations in production<ul style="list-style-type: none"><li>- Traditional outlook</li><li>- Lack of awareness and access to organized R&amp;D efforts</li></ul></li></ul>	<ul style="list-style-type: none"><li>- Emerging ties with institutions like National Institute of Design (NID)</li><li>- Availability of Technology</li></ul>	<ul style="list-style-type: none"><li>- Lack of capability to produce products like scarfs, upholsteries, which</li></ul>

	<ul style="list-style-type: none"> <li>- dyeing methods</li> <li>- Introduction of Zari testing technology</li> <li>- Product / Process innovation infused by the interaction with sub-contracting textile majors like RmKV, Pothys, Chennai Silks, etc.</li> </ul>	<ul style="list-style-type: none"> <li>- Inability of the cluster to improve upon the technology obtained through sub-contracting orders</li> <li>- Dependence on limited sources for innovation like designers by Cooperatives</li> <li>- Lack of proper networking for innovation among the principal producers and the technical agencies like CSB and WSC</li> </ul>	<p>Upgradation Schemes</p> <ul style="list-style-type: none"> <li>- Presence of R&amp;D institutions like CSB, WSC in the cluster which can network with national level agencies</li> <li>- Fierce competition infused by the entry of private players leading to innovation</li> </ul>	<p>are potential items of exports</p> <ul style="list-style-type: none"> <li>- Presence of a 'Groupthink' among the cluster stakeholders about the possibilities of innovation</li> </ul>
<b>Skills</b>	<ul style="list-style-type: none"> <li>- Dexterous designing</li> <li>- Unique weaving technique</li> <li>- Knowledge transfer through informal process of socialization</li> <li>- Availability of technical expertise with institutions like CSB, WSC present in the cluster</li> </ul>	<ul style="list-style-type: none"> <li>- Unrevised wage rates for weavers</li> <li>- Absence of social security particularly amongst the average and poor weavers making them indebted to the upper income groups</li> <li>- Poor human resource base</li> <li>- Business being traditional is managed in-house preventing any professional intervention</li> <li>- Lack of awareness</li> <li>- Lack of training programmes</li> <li>- Lack of coordinated efforts for training</li> <li>- Low rate of adoption of new techniques</li> <li>- Lack of professional management inputs</li> </ul>	<ul style="list-style-type: none"> <li>- Availability of training facilities and infrastructure with WSC and CSB</li> <li>- Influx of new skills through the private route</li> </ul>	<ul style="list-style-type: none"> <li>- Lack of preference to formal training among weavers</li> <li>- Lack of preference to weaving among younger generation</li> <li>- Unwillingness for skill upgradation</li> <li>- Hurdles in adoption of new techniques</li> <li>- Gap between the training institutions and weavers</li> <li>- Shifting of production base to 'Arni' due to labour cost advantage</li> </ul>

<p align="center"><b>Business Environment</b></p>	<ul style="list-style-type: none"> <li>- Presence of Co-operatives upholding the welfare of a section of weavers</li> <li>- Strong presence of a network of support institutions in the cooperative sector and government agencies</li> <li>- Inter-firm production arrangements</li> <li>- Collaborative arrangements in production</li> <li>- Informal sharing of information, tools and equipment,</li> <li>- Technological capability of institutions like CSB, WSC present in the cluster</li> <li>- Availability of skilled labour/weavers</li> <li>- Informal credit arrangements</li> </ul>	<ul style="list-style-type: none"> <li>- Environmental pollution</li> <li>- Weak institutional framework</li> <li>- Finance at high rates of interest affecting competitiveness</li> <li>- Infrastructure problems (power shortage, improper roads and water scarcity)</li> <li>- Lack of joint business development efforts</li> <li>- Limited access to credit facilities</li> <li>- Lack of supply of formal finance</li> <li>- Absence of active industry associations</li> <li>- Mistrust among cluster stakeholders</li> <li>- Dearth of common facilities for procurement, testing, effluent treatment, etc.</li> <li>- Low level of awareness</li> <li>- Lesser interaction with support institutions, lack of joint efforts between weavers for profit initiatives and organizations for development issues, and dearth of networking with relevant public service providers/ NGOs</li> <li>- Unorganized units</li> <li>- Local lobbying for power, political interference, key controls held by master-weavers and lack of professional management in Cooperatives</li> </ul>	<ul style="list-style-type: none"> <li>- Kanchipuram being chosen as a destination for Handloom Export Processing Zone and to be supported by central funding to the tune of Rs.60 lakhs</li> <li>- Infrastructure development being planned under SITP and related schemes</li> <li>- Increasing popularity as a speciality silk fabric production centre with potential to strengthen the networking with external firms</li> <li>- Growing ties between the Chennai-based textile retail majors and local master weavers</li> </ul>	<ul style="list-style-type: none"> <li>- Looming up of Arni as a potential competitor</li> <li>- Products of other origin being marketed in the brand name 'Kanchipuram'</li> <li>- Shifting of production base to Arni and market to Chennai by the Chennai-based textile retail majors</li> </ul>
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		<ul style="list-style-type: none"> <li>- Notorious intermediaries controlling raw materials, market and even credit</li> <li>- Differing perceptions and priorities among labourers, dominance of caste feelings</li> <li>- Gender discrimination preventing women from assuming key positions and leadership</li> <li>- Infighting among various actors</li> <li>- No association works on business management and the entrepreneurs are mainly working with their own self-efforts</li> <li>- Role of associations limited to advocacy</li> <li>- Prevalence of brokers and intermediaries</li> <li>- Lack of clarity in defining the geographical spread for GI</li> <li>- Lack of strict/effective monitoring mechanism to check the intermediaries and implement the protective regulations</li> </ul>		
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**Summary:**

From this chapter it could be concluded that though there are various important support institutions present in the cluster, their linkages with the principal producers is weak. Hence there is a necessity to bridge the gap between the support institutions, BDS providers, financial institutions and the forward linkages with that of the principal production system to boost the competitiveness of the cluster. The detailed SWOT analysis on the aspects of technology, innovation, markets, inputs, skills and business environment identifies the potential areas of opportunity and strengths which can be harnessed to tap the same for the benefit of the cluster.

With a view of the above analysis, a detailed logical framework matrix has been proposed in the suggestions section for the development of Kanchipuram Silk Weaving Cluster.

**References:**

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- Narayanasamy N. **Participatory Rural Appraisal**, Gandhigram Rural Institute, Gandhigram, 2001.



## **Chapter 8**

### **FINDINGS, SUGGESTIONS & CONCLUSION**

Kanchipuram Silk MSME cluster is a traditional cluster, which has been surviving through ages with its own resilience and vulnerability, employing thousands of dexterous weavers by carving a niche for itself in the market. Though the cluster has survived for ages there is a rising threat to its future survival due to the changing trends in the business environment.

This study was undertaken to map the cluster stakeholders, and analyze their linkages, in order to chalk out strategies for boosting the competitive advantage of the cluster with the following objectives.

#### **Objectives**

- To review the progress of Silk Weaver Cooperatives functioning in the cluster
- To study the business operations of the principal production system of weavers and master weavers/retailers in the cluster
- To identify, map and analyze the linkages of the stakeholders in the Kanchipuram Silk Weaving Cluster
- To study the cluster dynamics in terms of knowledge transfer and operation of the diamond theory of competitive advantage
- To perform a SWOT analysis of the cluster in terms of its markets, technology, innovation, skills and business environment.
- To document good and innovative practices, problems at grassroots and implementation of policies in the cluster in the form of case studies
- To suggest suitable policy measures for strengthening the linkages among stakeholders for developing the competitive advantage of the cluster

#### **Design of the Study**

The study is descriptive based on both primary and secondary data. The study area consists of three blocks of Kanchipuram district viz., Kanchipuram, Uttiramerur and Walajabad where intensive weaving activity is

in vogue. The study has adopted multi-stage random sampling technique for selection of sample units.

Due to the high degree of homogeneity and the minor deviations among the cooperatives, it was decided to restrict the sample size to one percent of the universe i.e., active members, which numbered to 115. An equal number of respondents were chosen in the private sector for equal representation.

In addition, about 30 retailers / master weavers have been chosen by using the 'snowballing' technique, since there was no published data available about them. Since it was necessary to elicit information on the problems of the cluster in production and marketing aspects, members who were opinion leaders and had a good understanding of the overall perspective of the industry were selected for the study. Apart from these, government authorities, heads of technical institutions, leaders of traders association and support service providers were interviewed to gain an overall understanding of the cluster linkages and their specific roles in the cluster.

The detailed analysis of data for Cooperatives, Weavers, Retailers/Masterweavers has given a comprehensive understanding of the status of various stakeholders of the cluster. The salient findings have been presented in this section separately for cooperatives, weavers and retailers/master weavers.

### **8.1 Kanchipuram Silk Weaver Cooperatives:**

Out of the 21 Cooperative Societies, two are exclusively marketing cooperative societies, which have been established to provide marketing services for the products of weavers/master weavers who are not covered under the cooperative fold. Short term working capital loans are given to the members on pledge of their stock to the cooperative. The rest of 19 Cooperatives are production cum marketing societies. After careful analysis of the data obtained from these Cooperatives, the findings arrived at have been listed below:

#### **8.1.1 Organisational aspect:**

- Owing to the combined effect of closure to membership and withdrawal/retirement of members, the Cooperatives have been witnessing a continuous slump in membership growth. With a fall in membership, the decline in share capital became inevitable.

#### **8.1.2 Production:**

- In the case of total production, there has been a decline only during 2003 and 2006. A hike in production value is observed in 2004. But there is only a marginal hike in production rate in 2005. This may be due to the rise in prices of raw material inputs like yarn and zari. The other main reason affecting production growth is the slump in sales and availability of cheaper varieties of silk in the market. In order to avoid the accumulation of stocks, the Cooperatives have decided not to produce further.

#### **8.1.3 Sales:**

- The annual growth rate in sales is found to have been declining throughout the period of study (vide table 4.4), the main reasons being (i) the availability of cheaper varieties of silk fabrics produced in other clusters like Arni, Kumbakonam, etc., (ii) imitation silk sarees from powerlooms at a lesser price, (iii) increasing use of fake zari in the silk sarees and selling them at lesser prices, (iv) problem of brokers and (v) unfair trade practice of selling goods of other origins as Kanchipuram sarees. Other problems listed were lesser sales promotion and advertising budgets for the Cooperatives, which put them at a disadvantage against their private competitors.

#### **8.1.4 Profitability:**

- Only ten out of 21 Cooperatives have been able to register a profit from business operations and there has also been a fluctuating trend. This can be mainly attributed to the continuous hike in the cost of raw materials (especially zari), fluctuating trend in sales and restriction of production. High competition from the private players, welfare oriented approach and absence of professional cost management practices by the Cooperatives, were the other reasons for the trend.

- Only three (14.29 percent) out of the 21 Cooperative Societies viz., Murugan, Thiruvalluvar and Arignar Anna, have recorded a net profit in the recent period.

#### **8.1 .S.Welfare/Support:**

- The fluctuating trend in production has resulted in a similar trend in wage payment too. Due to the slump in sales, the cooperatives have restricted their production resulting in decrease in payment of wages.
- Even in the case of profit-making Cooperatives, bonus has not been a regular feature, in the recent five year period, the main reason being the decreasing sales revenue percolating into all other beneficial aspects like bonus, etc.
- Only about five of the Cooperative Societies have been able to provide cash advance to its members. Two of them are marketing societies which advance 75% of the value of products on pledge by the members for marketing them. Except Kalignar Karunanidhi Society, the other two Kamakshiamman and Kanchi Society are bigger societies which are capable of supporting their members continuously with such welfare measures.

#### **8.1.6. Finance:**

- There has been an increase . in the total cash credit availed by Cooperatives from the year 2004. In 2006, a positive growth rate could also be seen, inspite of the withdrawal of interest subsidy by NABARD, which shows the vitality of this facility for the functioning of Cooperatives. It could also be observed that in the case of Sri Varadharajaswamy society there has been a continuous decline in the availing of cash credit due to the accumulated losses and associated restriction of production.

#### **8.2 Weavers:**

In the system of handloom weaving, there are two common methods of classifying the weaver. They either are independent weavers with their own looms or shall be attached to a master weaver under whom they work. With the advent of Cooperatives in the Kanchipuram silk weaving, like a private

master weaver, the cooperatives also became an important category. In this study, the weavers of Kanchipuram Silk Weaving cluster have been classified into five categories viz., independent, those who were attached to master weavers, those who were members of cooperative society, those who weaved both for the cooperatives and independently, and those who were independent weavers and also weaved for private master weavers. The major findings obtained from the analysis of primary data obtained from the different categories of weavers are presented below:

### **8.2.1 Profile of Weavers:**

- • About 39.13 per cent of the weavers were members of cooperative societies followed by the combination of both independent and attached to a private master weaver category (35.66 per cent). A tiny proportion of respondents (2.17 per cent) were independent weavers since it is very difficult in the prevailing scenario to survive out of both the dominant systems.
- Majority (64.78 per cent) of the weavers were middle aged (33 - 50 years). Only about 16.09 percent of the respondents were found in the younger age group of 16-33 years. Within this category, majority of the respondents were attached to private master weavers or were weaving independently and also for master weavers.
- About 60.4 per cent of the weavers were men. Between men and women, majority (39.6 per cent) of the women were members of cooperatives, and a nearly equal proportion (37.4 per cent) were in the combined category of both independent & attached to “master weaver” category. The male weavers also follow the same trend with the majority (38.8 percent) of them weaving exclusively for cooperatives, followed by the combined category of those who weaved both independently and for the master weavers (34.5 per cent).
- A little more than half of the weavers belonged to backward community (53.48 per cent) followed by most backward community (46.52 per cent).

- Among the weavers, about one third of the respondents were illiterates. About 42.62 per cent of them were primary educated. Only about 2 percent of the respondents were graduates.
- About a little more than half of the respondents have acquired their basic training in weaving from their family (52.61 per cent) and the rest (47.39 per cent) have begun their career as workers in looms and have graduated to be weavers of their own at a later period of time.
- A majority (58.26 per cent) of the weavers lived in tiled houses, which is also the reflection of their 'hand-to-mouth' existence. Some of the members of bigger cooperatives have been beneficiaries of 'Group house' scheme and lived in those houses. About 30.87 per cent of the respondents lived in group houses. Only about ten percent of the respondents lived in *pucca* houses.
- About 60.87 per cent of the weavers owned the houses in which they lived. While about one-fourth of the respondents lived in rented houses, the rest (13.91 percent) lived in leased houses. Among the respondents, members of Cooperatives were the largest group with own houses (40 per cent) being the beneficiaries of group house scheme. While majority (39.65 per cent) of the weavers in private fold who weaved both independently and for master weavers, resided in rented houses they were also the second largest group (33.57 per cent) with own houses.

#### **8.2.2. Production:**

- Above 70 per cent of the weavers were having a minimum of 16 years to a maximum of three decades of weaving experience. About 12.61 percent of the respondents had a weaving experience of 31 years and more. But under this category, active weaving is less, due to the age factor. The active weavers were found in the middle category of 16 - 30 years.
- While majority (60.87 per cent) of the weavers worked on pit-looms, the rest (39.13 per cent) used 'raised' pit looms. A majority (62.17 per cent) of them who were attached with master weavers and those who weaved independently used pit looms. The weavers who weaved for

cooperatives (54.44 per cent) and living in housing colonies of the cooperative society used 'raised' pit looms.

- About 48.26 per cent of the respondents operated two looms closely followed by those who operate a single loom (46.96 per cent). Only about 4.78 per cent of the respondents were found to operate three looms.
- About 81.74 per cent of the weavers have not made any modification or improvement in their production facility i.e., looms in the recent period.
- More than 60 per cent of the weavers employed *Jacquard* in their looms, followed by those who used the traditional *adai* technique (33.91 per cent). About 5.22 per cent of the respondents were found to use both *adai* and *Jacquard*, since they had more than one loom in operation.
- In majority of the cases (48.26 per cent) on an average, about 2 members of the family were involved in weaving activity apart from the respondent. In the case of about 46.97 percent of the respondents only one member from the family helped in weaving, which in most of the cases were their spouse or wards. Only in about 4.77 per cent of the cases, three members from the family were involved in the enterprise.
- Less than half (45.22 per cent) of the respondents earned between Rs.7001 to Rs. 10500/- as wages per annum. About 23.48 per cent of the respondents earned below Rs.7000/- as wages per annum.
- Majority (47.39 per cent) of the weavers were employed between 101 to 200 days in a year (vide table 5.16). The private weavers, who weave both independently and are attached to master weavers, worked for more than 300 days in a year, for earning a higher income. The weavers in the private fold earn 40 per cent lesser wages when compared to weavers of Cooperatives
- About 90 per cent of the weavers produced silk sarees. About 6.96 per cent of them produced all varieties - sarees, silk skirts and churidhars.

- More than 61 per cent) of the respondents were not using computerized designs. Usage of Computerized designs is slowly picking up with the silk cooperatives. Two of them - Anna Society and Thiruvalluvar Society have installed computers for designing and computerized machines for producing the design punch cards. Majority of the respondents (42.70 per cent) in the private fold - attached to master weaver and independent category were found to use computerized designs. Usage of *adai* could also be a major reason for this trend, since design punch cards find use in *Jacquard* looms.

### **8.2.3. Market Linkages:**

- All the available channels for marketing were utilized by the weavers. Since the possibility of selling through outlets of Cooperative Societies is restricted to its members, only about 47.39 per cent of the respondents were able to utilize that facility. The channels of master weavers (60.87 per cent) and local traders (58.26 per cent) were open also to the members of Cooperatives i.e., the weavers were free to supply their produce to these local traders and master weavers.
- About three-fourth of the weaver respondents obtained their raw materials either from Cooperatives or master weavers (vide table 5.21). Only about 2.17 per cent of the respondents were making their own purchases since they were independent weavers.

### **8.2.4. Backward Linkages, diversification and transfer of know-how:**

- There is a well developed local source for production equipments (weaving appliances) in the cluster. Also the repair services for the looms were available locally. Some of the parts in loom like Jacquard boxes and design punch cards were sourced from Madurai. In such cases, the local traders helped to source the equipments and supplied them. Cooperatives had their own repairing units and technicians who shall help the weavers in keeping the looms fit for production. Moreover the Cooperative weavers were granted special benefits under the weaving appliances procurement/repair schemes, under which arrangements are made in bulk and the benefits are passed on



to the weavers. There is no such organized mechanisms/support for

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- Apart from the supply of equipments, these sources also supplied technical information, maintenance tips, latest equipments available (though much of innovation is not available), repair and support services, etc.
- A little less than 80 per cent of the weavers diversified their production in terms of changing the colour combinations, designs, patterns, variety, etc., as per the trends in market and based on the inputs given to them by their respective masters (either the master weaver or the Cooperative Society). But still there were about one-fifth of the respondents who produced only traditional varieties and did not diversify their production.
- More than half of the weavers (53.48 per cent) drew support from cooperatives for product diversification, followed by sub-contracting large manufacturers (13.04 per cent) like RmKV, Pothys, Chennai Silks, etc (vide table 5.25). While a little less than five percent of the respondents took the support of technical institutions like Central Silk Board and Weavers Service Centre, and about 5.22 percent of the respondents drew support from fellow weavers.
- Majority of the weavers (43.04 per cent) have received support in the form of supply of design and materials required for diversification followed by 23.04 per cent of the respondents who received complete support for product diversification from Cooperatives in which they are enrolled as members. About 6.96 per cent of the respondents have received advice on equipments to be used and processes to □□ adopted.

#### **8.2.5.Finance:**

- All the members of Weaver Cooperative Societies (50 percent) have availed some loan from their Cooperatives, out of which a majority (53.91 per cent) have availed a sum between Rs.5001-9000/-. This is followed by the master weavers (38.26 per cent) who had been the second major source of credit. Nearly an equal number (one-fifth) of

the respondents were found to have borrowed from money lenders and MFIs, which denotes that micro finance is slowly gaining its dominance over the usurious money lenders

- Personal sources were the main support for about 18.70 per cent of the respondents for their emergent credit needs which was predominantly less than Rs.5000/- for majority (76.74 per cent) of this category.

### **8.3. Retailers/Masterweavers:**

#### **8.3.1. Personal Profile:**

- More than one third (36.67 per cent) of the master weavers/ retailers were in the age group of 31 - 45 years of age
- The maximum numbers of looms (101 and above) were owned by the oldest age category, which may be due to experience in the trade and expansion of business over a period of time.
- About half of the master weavers/ retailers were educated up to secondary school followed by graduates (26.67 per cent). It is also encouraging to notice that a few respondents were post graduates (20 per cent).
- Majority of the respondents (80 per cent) have not undergone any formal training and about 13.33 percent of the respondents underwent training programmes organized by Central Silk Board.

#### **8.3.2. Organisational aspects:**

- About 43.33 per cent of the retailers/master weavers owned between 31-50 looms followed by those who owned only up to 30 looms (36.67 per cent). Only about ten percent of the respondents have reported to have more than 100 looms in operation.
- • A thumping majority of the respondents have acquired their basic training in weaving from their family (70 per cent) and the rest (30 per cent) have begun their career, as workers with master weavers / retailers and have graduated to be retailers at a later period of time.
- Majority (60 percent) of the respondents have inherited the enterprise from their parents. This was followed by the category of those who have invested their savings to initiate the enterprise (23.3 percent),

which is the case of spin-offs. While family and relatives funded the enterprises of ten percent of the respondents, private financiers were their source of funding for about 6.67 percent of the enterprises.

- More than half of the respondents (53.33 per cent) confined their product line only to silk sarees. A little less than half of the respondents (46.67 per cent) were dealing with silk sarees as well as other products like silk skirts, churidhars, etc. While sarees dominate the stock followed by silk skirts, most of them reported that churidhars were made to order.
- Majority of the respondents specialized both in products (86.67 per cent) and processes (80 percent), since both of them were inseparable elements.
- About 46.67 per cent have reported that about two and three family members were involved in the enterprise. Only in about 6.66 percent of the cases it was only one family member involved in the enterprise. The looms were installed at the houses of the weavers. If the houses of weavers were scattered at various locations more members of the family shall be involved in coordinating the activities.

### **8.3.3. Financial aspects:**

- For 73.33 per cent of the retailers/master weavers, personal sources like family, friends and relatives, own savings, personal assets, etc., have been the major source of working capital financing for the enterprise. This is followed by the Non-Banking Financial Companies (NBFCs) which has been quoted as the second major source (16.67 per cent). Only about 10 percent of the respondents have quoted bank to be their source of working capital.
- Majority of the respondents (60 per cent) availed the financial services of the banks, but faced the problems of accumulating stock. The cash credit system was available only for cooperatives through the Central Cooperative bank, which was not available to the private retailers. But a similar system by which loans on value of stock was given for some

retailers who have established their credibility with the bankers. Others resorted only to informal sources and moneylenders.

#### **8.3.4. Benefits from Channel linkages**

- Provision of market intelligence (76.67 per cent) was found to be the major service rendered by the channel members followed by provision of design inputs (70 per cent). With the geographical proximity and focus on the same market, the transfer of market intelligence happens easily in the Kanchipuram cluster. Other services provided by the channel members are provision of raw materials (20 per cent), technical assistance (13.33 per cent), training inputs (13.33 per cent) and credit facilities (10 per cent).
- All the respondents have felt that modification/production of the product according to the tastes/needs of the customers was the chief attraction. But due to the availability of cheaper substitutes, 'price' has also loomed up as a top factor in the minds of all respondents. Thus the unique product quality of Kanchipuram silk has occupied only the second place, with 86.67 per cent of the respondents rating it to be the major factor of attraction. In spite of the fact that textile retail majors employing intensive advertising campaign in print, audio and visual media, 'advertising' is yet to be realized as an important factor for attracting customers by the cluster members. Only about 16.67 per cent of the respondents have rated advertising as an important tool for attracting customers; the main reasons being high cost of advertising and lack of immediate tangible benefits.

#### **8.3.5. Awareness/Attitude about emerging initiatives:**

- A thumping majority (93.33 per cent) of the respondents exhibited a favourable attitude and stated that the zari testing facility was extremely useful and a step towards saving the sellers of original goods. About 6.67 per cent of the respondents were not very much convinced with the present method of X-ray Fluorescence testing.

- Only about 13.33 per cent of the respondents were aware of apparel park initiative (vide table 5.37), Even those who knew were quite skeptical about the benefits of such an opportunity.
- A majority (80 percent) of the respondents were aware about Geographical Indication. But Geographical Indication being in its initial stages, even the producer/merchant community is yet to become fully aware of the concept. The Kanchipuram Silk Saree Small Producers Association is planning to sensitize the production/merchant community in this regard.

#### **8.3.6. Product diversification and support:**

- Majority (70 per cent) of the master weaver/ retailers diversified their production in terms of changing the colour combinations, designs, patterns, variety, etc. As per the trends in the market they diversified their collection. About 30 per cent of the respondents preferred to stock the traditional varieties and did not diversify, due to the demand for traditional varieties, lack of funds for diversification, non-availability of technical support, non-availability of technical knowledge/labour, fear of risk, etc.
- Half of the master weavers/ retailers (50 per cent) depended upon the local technical and R&D institutions like Central Silk Board and Weavers Service Centre for product diversification, followed by sub-contracting large manufacturers (20 per cent) like RmKV, Pothys, Chennai Silks, etc. While about 16.67 per cent of the respondents drew support from skilled employees and about 13.33 per cent of the respondents were supported by fellow master weavers / retailers in their diversification endeavours
- About 36.67 per cent received support in the form of training required for diversification followed by supply of designs (33.33 per cent)

#### **8.4. Organization/Business Environment - Cluster level:**

- Due to inadequacy of personnel even in bigger profit making cooperatives there is absence of proper leadership, the officials are overburdened with the twin responsibilities of managing two or more societies, so they are unable to concentrate their energy for the development of the institution
- There is a highly competitive business environment wherein any new design developed is duplicated in no time by the other weavers and sold at a lesser price than the original design developer. This subconscious barrier of hostility stalls developing the feeling of unity and trust amongst each other.
- Business Development Service providers such as raw material suppliers, transporters, design and colour forecast, quality testing are available in the cluster. Though some common facilities are established by Central Silk Board, Anna Silk Exchange, Weavers Service Centre, etc., they are not widely accessed by private sector. The services in terms of market research services, export marketing, etc., are completely absent in the cluster as visible in the cluster map.

#### **8.5. Problems in Production:**

The escalating cost of raw materials has been ranked as the topmost problem in production (37.10 per cent) followed by low wages (35.69 per cent), problem of working capital availability (74.92 per cent), delay in payment of wages (76.33 per cent), increasing use of fake zari in the production of sarees (43.10 per cent), non-availability of labour (47 per cent), climatic factors (43.11 per cent) and delay in availability of raw materials (39.58 per cent). All the respondents of Traders Association/Cooperatives and a majority (66.67 per cent) of the retailers have ranked increasing use of fake zari as the third major problem facing the cluster in terms of production, since this affects the quality image of the cluster.

## 8.6. Problems in Marketing:

The major problems faced in marketing were, the increasing prices of finished goods due to the escalating cost of raw materials (74.21 per cent), increasing use of fake zari (72.08 per cent), unfair trade practices like selling the sarees of other origins/fake goods/ power loom products in the brand name of 'Kanchipuram' (59.36 per cent), lack of advertising (56.89 per cent), problem of brokers and middlemen who mislead the buyers (71.03 per cent), availability of cheaper substitutes from the competitor clusters like Arni, Kumbakonam and Dharmavaram, (54.42 per cent) and lack of product diversification (53.36 per cent). Lack of advertising and sales promotion techniques by the cluster firms were other major areas of concern for a mass consumption product like silk sarees.

## 8.7. Results of Statistical Analysis:

### 8.7.1 Correlation Analysis

The Correlation analysis was carried out to understand whether there was any relationship among the variables viz., age of the weaver, years of weaving, number of looms, installed capacity of looms, actual output per year, number of days employed, number of family members involved in the enterprises, wages earned and years of education. It was found that there exists a positive and significant correlation between the variables age, years of weaving, number of looms operated, number of family members involved in the enterprise. Except the years of education all the other variables exhibited a positive and significant relationship with other variables. A perfect correlation is exhibited among the variables viz., number of days employed and actual output per year, and, the number of looms operated and number of family members involved in the enterprise.

**8.7.2. T-test:** The t-test was carried out in order to find out whether there existed any significant difference in the average wages earned by men and women weavers. The results of the t-test indicated that there was no significant difference in average wages earned by men and women weavers,

and there is no significant difference in number of days employed between men and women. The main reason was that the wages were fixed based on the complexity of the design weaved rather than the gender of the weaver.

' 8.7.3. ANOVA: In this study, the weavers of Kanchipuram Silk Weaving cluster have been classified into five categories viz., independent, those who were attached to master weavers, those who were members of cooperative society, those who weaved both for the cooperatives and independently, and those who were independent weavers and also weaved for private master weavers. With a view to test whether there was a significant difference among the different categories of weavers Analysis of Variance (ANOVA) test was carried out for the variables viz., no. of looms, actual output per year, wages earned, number of family members involved in the enterprise, own sources of funds, loan from cooperatives, loan from master weavers, loan from money lenders and loan from microfinance. The results of ANOVA indicated that there existed a significant difference among the different categories of weavers on the chosen variables. The main reasons were,

- > The weavers attached to Cooperatives earned higher wages than the other categories of weavers. They also had access to welfare measures of Cooperatives viz., cash advance, bonus, insurance, etc. Their production and marketing requirements are completely taken care of by the Cooperatives.
- ' > The other categories of weavers earned lesser wages per piece of produce and did not have access to any such welfare measures as applicable to the members of Weaver Cooperatives. Especially the independent weavers had to take care of their production and marketing requirements on their own, which is a difficult task.

#### **8.7.4. Multiple Regression Analysis:**

The Multiple Regression analysis has been used in this study to find out the variable that had a higher influence over the wage income of the weavers. In the linear multiple regression model, used in this study, wage income of the



weavers (Y) has been taken to be the dependent variable quantifiable variables like age in years ( $x_1$ ), education in number of years ( $x_2$ ), years of weaving ( $x_3$ ), actual output per year ( $x_4$ ), number of days employed ( $x_5$ ), number of family members involved in the enterprise ( $x_6$ ), finance mobilized from own sources ( $x_7$ ), loans obtained from cooperatives ( $x_8$ ), advances obtained from master weavers ( $x_9$ ), credit availed through microfinance ( $x_{10}$ ) and borrowings from moneylenders ( $x_n$ ) have been taken to be the independent variables. The co-efficient of determination ( $R^2$ ) is 0.631. It denotes that about 63.10 per cent of the total variation of the dependent variable 'Y' (wage income of the weavers) was explained by the independent variables included in the multiple regression analysis. The F ratio (33.960) was also found significant. From the value of  $t$  statistic corresponding to the regression co-efficients, it was found that the three variables actual output per year ( $x_4$ ), number of days employed ( $x_5$ ) and number of family members , involved in the enterprise ( $x_6$ ) were found to be statistically significant, indicating the importance of these variables in affecting the wage income of the respondents. While the independent variables like number of days employed ( $x_5$ ) and number of family members involved in the enterprise ( $x_6$ ) exhibited a positive relationship with wage income of the weavers, the variable actual output per year ( $x_4$ ) showed a negative relationship. The reasons being:

- > More the number of days employed more shall be the wages earned
- > When more number of family members are involved in the enterprise, the wages given to the outsider gets saved and there is flexibility of working hours which shall enhance productivity thereby resulting in increased income
- > The negative relationship between actual output per year may be due to the reason that the wages earned for an intricate design is higher but it involves a longer duration of work which restricts the number of sarees produced, whereas simpler designs can be woven faster but the wages earned will be comparatively lesser, hence the inverse relationship.

## **8.8 Analysis of Cluster linkages:**

The analysis of the cluster linkages reveals that the linkages of principal firms with the BDS providers are weak. There are also issues which call for attention from policy perspective like regulation of competition, creation of a conducive environment for business, etc. With regard to the promotability aspect, there is a need for product diversification which is possible only when the linkages among the stakeholders are strengthened. The cluster cooperation matrix has identified potential areas for development of linkages and social capital.

The analysis of competitive advantage differences reveals that among Cooperatives, there is a need to invest in technology as well as services and monitor cost. The diamond of competitive advantage analysis has indicated the various areas of concern for developing the competitive advantage of the cluster. The analysis of knowledge management has highlighted the issues in knowledge transfer, the need to preserve the knowledge and the strategies for facilitating transfer of knowledge.

The inferences from Venn diagram analysis reveal that though there are various important support institutions present in the cluster, their linkages with the principal producers is weak. Hence there is a necessity to bridge the gap between the support institutions, BDS providers, financial institutions and the forward linkages with that of the principal production system to boost the competitiveness of the cluster.

The detailed SWOT analysis on the aspects of technology, innovation, markets, inputs, skills and business environment identifies the potential areas of opportunity and strengths which can be harnessed to tap the same for the benefit of the cluster.

## **SUGGESTIONS**

The detailed analysis of the Kanchipuram Silk Weaving cluster in the previous sections and the findings of the study have indicated the various issues that need to be addressed for boosting the competitiveness of this traditional cluster. Based on the analysis and findings suggestions for the development of this cluster are presented in this section of the study. The suggestions have been classified under five specific heads viz., Cluster development, production, marketing, finance and human resource development (Section I). A cluster map portraying the envisaged cluster linkages has been presented in this section (Section II). Also a logical framework specifying the vision, objectives and activities to be taken up for cluster development has been furnished (Section III).

### **tion I**

#### **Cluster Development**

- Evolving a consensus among the cluster stakeholders on addressing the common issues through cluster development method is essential and can be done through a combination of exposure visits by opinion leaders to successful clusters and follow-up discussions
- Handloom weavers, master weavers/cooperatives can be grouped into consortia. These consortia can be legally registered under the Charitable Societies Act with representatives from each society serving as members of the relevant consortia
- Cluster consortia should also include private entrepreneurs, representatives of small producers and cooperatives for promoting overall development of the cluster.
- A Cluster Development and Coordination Committee (CDCC) involving stakeholders of the cluster must be formed with professionals like Cluster Development Agents (CDAs). This committee can help monitor the progress of interventions with an emphasis on evolving sustainable models for cooperatives.

- Non-Government Organisations (NGOs) should be actively involved in the cluster development initiative since they can work in proximity with the grassroots.
- '*Trust Building*' shall be the most challenging phase for the CDAs, since there is a widespread mistrust among the cluster stakeholders due to stiff internal trade rivalry. Pilot projects demonstrating *tangible* benefits shall prove helpful in the '*trust building*' process.
- As the trust level increases the real issues shall become more defined. The identified problems can be fine-tuned based on the inputs received through interactions during and after the initial pilot level activities and level of commitment shown by the firms.
- Benchmarking with best practices, training and exposure of implementers (firms, institutions and associations) can be organized to further enrich their level of understanding, thereby workout an optimal activity sequencing in each identified areas of concern.
- In the case of institution building for cluster development, one important factor to be borne in mind by the CDAs is the '*traditional*' ties of the cluster. Creation of agencies which may affect such ties shall prove unsustainable. Establishment of democratic institutions shall in a way be helpful in overcoming such barriers.
- *Opinion leaders* among the networks within the clusters have to be identified and convinced to facilitate the process of cluster development.
- The cluster development plan should focus on creation of common R&D infrastructure in the areas of production technology, product differentiation, design development, technology upgradation, waste reduction, quality control and effluent treatment, and in the areas of training/capacity building, export orientation and facilitation, etc., without affecting the individual competitiveness of the firms.
- Linkages have to be forged with the available support schemes for executing planned joint initiatives of consortia of units

- Apart from cooperative sector, special focus must be given to develop other enterprise segments including tiny and small (non-cooperative) weavers and also exporters
- Consortia-led interventions must be encouraged with the CD As and the Directorate/support institutions playing a *catalytic* role
- Self-initiatives by consortia like organizing workshops, programmes on quality assurance, facilitation of participation in fairs, infrastructure development focusing on exports and quality upgradation must be encouraged.
- Progressive intertwining of cluster development interventions and support even amongst the micro-artisans have to be pursued on a participatory mode.
- In order to promote social capital in the cluster there is a need to emphasize and give incentives for cooperation to overcome opportunistic behavior, lack of trust, and a path-dependent preference for vertical integration.
- All cluster development initiatives should adopt the 'inclusive' and 'participative' principles i.e., all stakeholders, especially the private entrepreneurs and independent weavers should be involved in the process of cluster development
- As the cluster development activities start getting implemented attempts can be made to create a system, by strengthening the local institutional framework that will continue to work, to realize the long-term vision of the cluster even after the withdrawal of CDA.
- Membership in cooperatives must be encouraged to bring more number of uncovered weavers into the fold of cooperatives
- Measures have to be taken to popularize the Silk Mark, Handloom Mark and Geographical indication both among the cluster stakeholders and customers
- Stringent administrative action has to be initiated to eradicate fake goods from the market
- The traders association must be strengthened and their participation in cluster development efforts has to be enhanced

- Politicization of cooperatives and other weavers' organizations must  
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- Small traders must be supported by providing them assistance in the areas of production, technology, market linkages, quality control, finance, etc.
- The emerging business to business (B2B) sub-contracting relationship with the textile retail majors of Chennai must be strengthened, since it is a viable route for sustainable sales.
- Market research to gauge the expectations of the B2B buyers should be initiated in order to ensure customer satisfaction
- Keeping in view the inherent weaknesses of this handloom cluster, the government should continue to support the sector with welfare measures like social support for weavers (pension/insurance, membership in cooperatives).
- Government must adopt progressive policies to promote joint R&D efforts in the areas of improving production technology, quality control, product diversification, export oriented production, etc.
- Active measures like organizing fairs, facilitating participation in international fairs, exhibiting products in foreign markets, in lines of Council for Leather Exports must be initiated through the Handloom Export Promotion Council (HEPC).
- Special Handloom Processing Zone scheme sanctioned to the Kanchipuram cluster must be utilized properly by integrating it with the cluster development efforts.
- The cluster consortiums can avail projects like Deen Dayal Hatkargha Protsahan Yojana (DDHPY) from the office of the Development Commissioner of Handlooms, New Delhi, for product development, infrastructure support, institutional support, training to weavers, supply of equipments, marketing support, etc., both at macro (cooperatives) and micro level (weavers) in an integrated and coordinated manner. This shall help in increasing the efficiency level of the weavers and production capacity of the societies.

- The local/district administration can sanction grants-in-aid to establish common facility centres for post-loom processing, training, etc.,
- Convergence between the CDA and the district/local administration has to be developed since their functions are complimentary
- The traders associations need to look beyond the role of advocacy and must adopt a pro-active role for the development of the cluster.
- With the coming up of computer based information services, access to the world wide latest information has become instantaneous. Besides the macro trade information about the trends and direction of trade, investment & technology, the services are also used for match making among the individual enterprises. These types of services still do not exist in Kanchipuram. A pilot attempt has been done in this direction by JSN School of management. There is a need to play a pro-active role to institute such services through common facility center for at least a period of 3 years. The services could then be privatized on commercial basis once the private entrepreneurs take up such services on a wide spread scale. Initial technical assistance can be sought from 'TANSTIA-FNF center' based in Chennai, 'National Small Industries Corporation' (NSIC) and 'Federation of Indian Chamber of Commerce & Industry' (FICCI).
- In terms of sustainability of individual initiatives, the following elements have to be ensured:
  - S Efforts taken to improve the awareness about quality should be well accepted by the exporters in the cluster.
  - S The number of private consultants available in the cluster should increased due to the increase in demand. Moreover, the ensuing competition shall reduce the fees so that most services shall be affordable even to the small firms.
  - s. The importance of human resources development is well appreciated by BDS providers.
  - S The Traders/manufacturers Associations should be encouraged to create infrastructure like a separate building for conducting training programme for the middle level executives and workers.

premises to continuously conduct skill up-gradation programme and should identify an officer to work as CDA.

s A separate cell (Industrial Consultancy Cell) shall be created to have close liaison with the industry and to undertake the projects for industrial development, which includes part-time training programme for the executives and entrepreneurs.

Private institutions from the cluster should be encouraged to impart technology training in garment manufacturing and processing for the cluster firms.

#### **Production:**

- Access to common Business Development Services should be created by establishing common facility centres
- Common purchases can be done through the cluster consortia to optimize costs, which can help the producers in gaining benefits like discounts and a progressive move from purchase of capital goods to chemicals and yarn could be achieved
- Tie up with export clusters like knitwear of Tirupur, home furnishings of Karur, Bhavani and Chennimalai, for value addition in their products, can help the cluster in gaining a 'derived demand' out of their export orders.
- Product lines like low value/medium/high value items can be chosen and cooperative societies can specialize in a particular product line to avoid losses and earn profit
- Scientific inventory control must be adopted in Cooperatives. For instance, they can take up FSN analysis (Fast moving Slow moving and Non-moving) of their stock and plan the production accordingly to avoid losses.
- The cooperatives can pioneer novelty/export oriented products which can be followed suit by private sector
- Under the cluster development programme, design development activity can be done. The cluster consortia can appoint freelance designers through IIHT for developing designs in different product



categories and assist the societies in developing the samples. The paper designs thus produced can be developed as samples. This design intervention is expected equip the cooperatives to gain a better share in the export trade.

- Textile committee can organize workshops for sensitizing the weavers on various export oriented production issues by employing designers from abroad. Such an effort shall help in providing insights into the export markets and shall help in initiation of '*incubation centres*', which aims at market expansion.
- Computer aided design (CAD) systems are internationally used for creation of new designs. Such facilities have been set up inhouse by some of the larger Cooperatives and the Chennai based textile majors. Both CSB and WSC have such facilities. A few private facilities also exist in the cluster. In the long run, more private facilities should be set up by entrepreneurs in order to provide the design services to all exporters on commercial basis.
- The existing problem for creation of such novel designing facilities relates to lack of skills and risk on returns. Technical assistance from National Institute of Fashion Technology shall be sought and financial assistance at subsidized interest rates from the financial institutions such as SIDB1 be provided to the entrepreneurs willing to set up such services for job work on commercial terms.
- The technology and equipment gaps should be identified. 'Machinery and equipment committees' can be formed by the cluster consortia to negotiate common purchase and fill the gaps identified.
- Larger gaps in terms of physical infrastructure viz., effluent treatment, testing, exhibition and other facilities need to be identified. Support in the form of grants-in-aid must be synergized under the available schemes.
- The cluster consortia can be encouraged to participate in the '*Apparel Park Initiative*' and other firms can follow suit.
- Initiatives for establishing Quality Management Systems (QMS) certification can be done through the Cluster Consortia

- New product development initiatives must be encouraged by providing them '*seed capital*'
- Low cost product line to attract the mass ☐☐☐☐☐ of middle class, pilgrims and tourists have to be produced on a large scale. Smaller societies can be encouraged to take up such items, since this shall help in providing continuous jobs to its weavers.
- Weavers must be motivated to produce cost competitive products since it will fetch them continuous job orders
- Suitable cost-effective alternate technologies can be evolved and improved processing techniques to reduce level of effluents, along with training of personnel to minimise effluent creation be initiated in the cluster.
- With the assistance of the Government of India and institutions such as UNIDO and UNDP, tie ups with international institutions for pollution control facilities should be arranged. This will help in facilitating the setting up of common effluent treatment plants.
- Research and Development activities for new product development must be initiated in the cluster
- International catalogues providing insights into new fashions, new ranges of apparels are very expensive for individual firms to afford. Assistance needs to be provided for provision of such facilities to the cluster members. There needs to be a strong coordination on this with Traders/Manufacturers Association.
- A direct consequence of product diversification will lead to up-gradation of technology for the various firms at different levels. The up-gradation of technology seems especially required in dyeing, designing and fashion technology.
- The technology up-gradation has to be selective to the extent that it adds value for the enterprises through catalyzing the environment. Demonstration effect is one such solution since the initial step is usually the most difficult in to be taken technology advancement.
- Support in the form of subsidized interest rates or zero interest rates should be provided by institutions such as SIDBI to finance the first

few machines in the private sector that will be used for job work. These ventures, instead of appraising them on purely commercial considerations should be looked at as *quasi development* ventures. This type of support will provide a strong demonstration effect for the other enterprises that can then afford to buy the equipment on their own either for their in-house requirements or for job work purely on commercial terms.

- Setting up of computerized color matching systems would also lead to reduction in the wastage of dyes that takes place due to hit and trial method of mixing in an attempt to get a correct shade.

#### **Marketing:**

- Unprofitable showrooms of Cooperatives can be shunned and other showrooms can be upgraded with assistance available under existing schemes for handlooms
- Profiling of regular customers at showrooms of cooperatives can be taken up and relationship building exercises with them can be done to retain them. The profiling exercise can be done easily with the addresses of customers available in the receipt books.
- Personalized sales promotion techniques like special discounts, offers, personalized advertising of new product range, etc., for regular customers can be offered.
- Exploratory market research for Kanchipuram silk fabrics in export arena has to be initiated with the help of Handloom Export Promotion Council
- Strengthening the '*Loom World*' chain of outlets shall be of help to enhance the marketing prospects and shall help fighting the bogus cooperatives and unfair trade practices
- Linkages with tourism promotion agencies can help bringing in tourists to the '*Loom World*' outlets.
- Proper market segmentation exercise has to be taken up to understand the available market segments well and plan the marketing efforts accordingly

- Integrated 'market planning' has to be done by involving the field level personnel in the process. 'Bottom up planning' must be adopted.
- Authorized Sales agents of cooperatives, being a viable channel, must be encouraged with special strategies like dealer discounts, enhanced credit period and special offers
- Best Performance/Dealer of the year Awards can be instituted to motivate sales agents who promote the cluster products well
- Participation in international fairs can be encouraged through the Handloom Export Promotion Council
- The cooperatives can pilot the process of internationalization through Co-optex.
- The private sector creates hype for silk sarees through their extensive advertising campaign, which has to be utilized by the Cooperatives to boost their sales encashing on their 'quality' image with the customers.
- Cooperative societies in a consortium may be encouraged to pool invest their own funds and operate marketing outlets on a lease basis.
- Vantage points must be identified at entry points of the town and information booths on authorized silk traders must be made available there to the buyers
- The intermediate brokers must be kept away from the system by stringent administrative action.
- Tax exemption should be given to the silk saree merchants as a measure to promote this traditional industry.
- Tax holidays can be given to encourage participation of cluster firms in initiatives like Apparel Park and Handloom Export processing zones.
- Promotion of Common Brand is an important and strategic initiative undertaken for retaining the present market position in the open market competition. The collective brand promotion exercise has to be taken up for the cluster. Since there are no BDS available to provide a clear road map and strategy for the implementation it should be noted that requirements are multidimensional. Since most of the

units in the cluster are MSMEs, a minimum critical mass is required to implement it. The following steps may be followed for this exercise,

- Benchmarking and learning from experts
- Identification of a good agency for preparing the road map
- Creation of a small core group to sensitize the cluster sectors and close follow-up of the progress made in the implementation.
- Mobilization of the critical mass
- Finalization of parameters to finally join the brand network
- Identification of different BDS for auditing of parameters and international feedback on marketing
- Creation of draft Project Proposal for funding

**' Human resource/Personnel:**

- Performance linked incentives for showroom personnel can be introduced
- Awards for best performance can be introduced to motivate personnel of Cooperatives
- Appointment of professionals to head cooperatives can help in bringing in the much-needed dynamism among cooperatives
- Exposure visits to export-oriented handloom clusters must be organized to increase the awareness among the cluster members about the growth possibilities
- Capacity building and training of officials on cluster development methodology can be initiated
- Capacity building efforts also. have to be initiated in the areas of packaging, branding, sales promotion and export/import (EXIM) management.
- Training on quality control of handloom fabrics, dyeing techniques and advanced weaving can be initiated through Indian Institute of Handloom Technology (IIHT)
- Training in jacquard and dobby, dyeing and designing can also be given through WSC under Integrated Handloom Training Project

- Services of Research/Training institutions of repute like Indian Institute of Handloom Technology, National Institute of Fashion Technology, National Institute of Design, Entrepreneurship Development Institute, Gandhigram Rural University and those available in the cluster like JSN-SMS (which has conducted research on internationalization of SMEs), should be harnessed for capacity building among the cluster participants in the areas of management and internationalization of the cluster.
- The human resource development (HRD) programmes developed under the cluster development initiative, to provide formal, theoretical and practical training for weavers, master weavers and officials, shall be made available to the cluster on a sustainable basis by involving local institutions.
- The steps in implementing such a sustainable HRD mechanism shall involve the steps of identification of appropriate local institutions best suited to the target beneficiary,, creation of appropriate courses based on the needs of target beneficiaries, sensitization and demonstration to firms on the need for such inputs and demonstration to institutions on viability of providing such inputs as BDS.
- The type of training programs which are required to upgrade the skills of manpower needs targeting at all the intermediate processes.
- A comprehensive package of such programs on quality control, testing methods and export documentation needs also to be developed.
- The exporters need to be assisted to obtain the ISO 9000 series accreditation so that not only the technology and skills are improved but the management systems are also upgraded.

#### **Finance;**

- Merger of smaller and less profitable cooperatives with the bigger and profitable societies can help avoiding incessant losses.
- Microfinance through Self Help Groups should be encouraged at the level of weaver to provide them credit for their emergent and

production needs and also to support their enterprise. The established NGOs working in the area can be utilized for this purpose.

- Working capital support to the entrepreneurs of this sector must be enhanced
- Tax *holidays*' for exporters may be introduced to induce exports from the cluster.
- Prioritizing credit flow to the sector by banks has to be ensured. With right dosage of cheaper credit shall help in business promotion.
- Incentives for prompt repayers should be given by banks, to cultivate a *credit repayment discipline* among the borrowers thereby paving way to reduce *non performing assets* in this sector
- Alternative secondary occupation for the weaver households in the form of micro enterprises must be identified and can be promoted through microfinance to relieve them out of the debt cycle created as a result of *seasonal unemployment*.
- Special '*innovation fund*' should be created to promote technological, production and market innovation in the cluster.
- '*Incubation funds*' can be instituted for promotion of participation in initiatives like *Apparel Park*.

## Section II

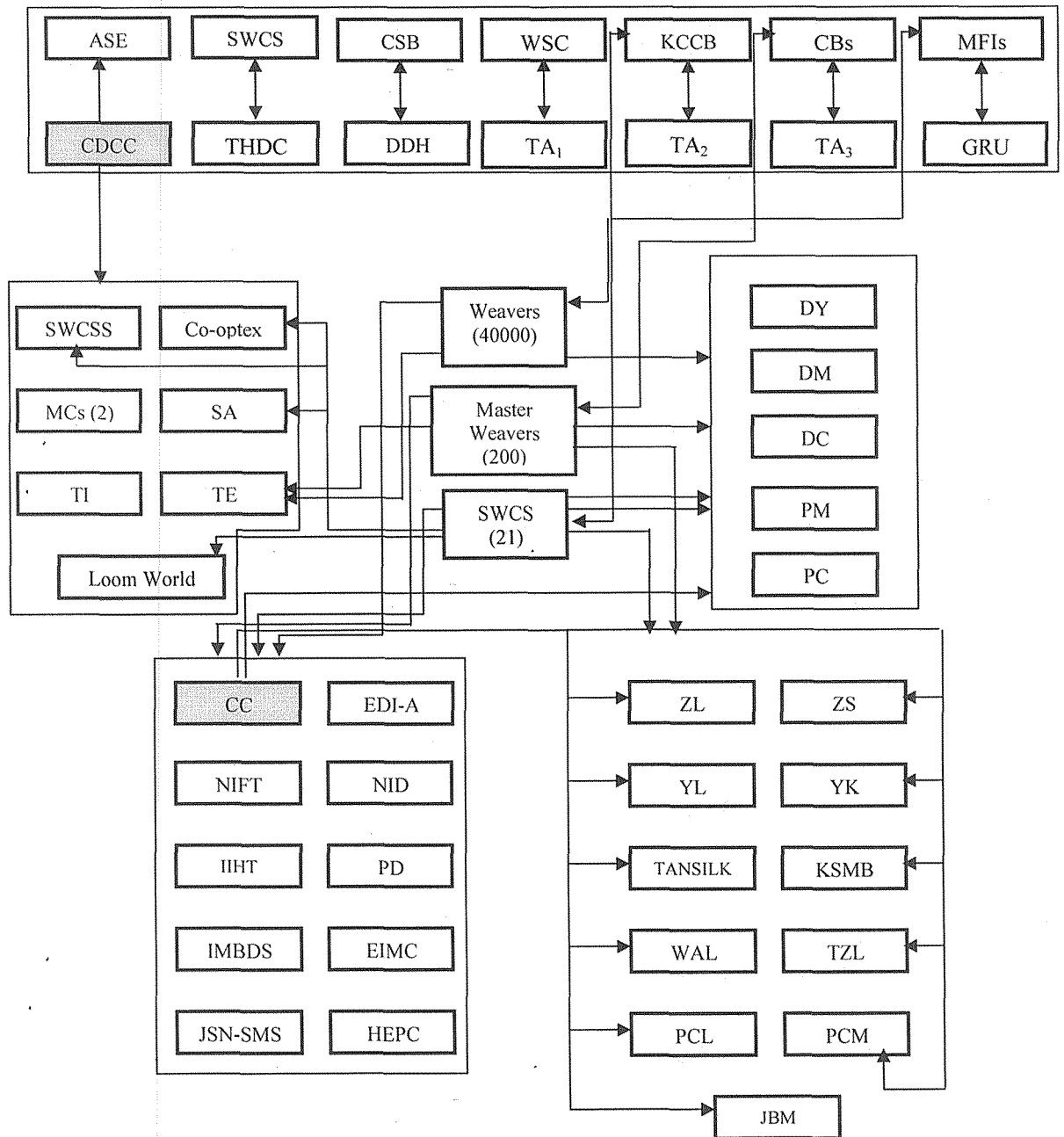
Figure 8.1

### Six modules of the Proposed cluster map

<b>Forward Market Linkages</b> <ul style="list-style-type: none"> <li>● SWCS showrooms (SWCSS)</li> <li>● Co-optex</li> <li>● Loom world</li> <li>● Marketing Coops. (MC)</li> <li>● Sales Agents (SA)</li> <li>● Traders – Internal (TI)</li> <li>● Traders – External (TE)</li> </ul>	<b>Support Institutions</b> <ul style="list-style-type: none"> <li>● Silk Weavers Cooperative Societies (SWCS)</li> <li>● Central Silk Board (SCTH)</li> <li>● Weavers Service Centre (WSC)</li> <li>● Kanchipuram Central Cooperative Bank (KCCB)</li> <li>● Commercial Banks (CBs)</li> <li>● Tamilnadu Handloom Development Corporation (THDC)</li> <li>● Deputy Director (Handlooms) (DDH)</li> <li>● Traders Associations (TA<sub>1</sub>, TA<sub>2</sub>, TA<sub>3</sub>)</li> <li>● Gandhigram Rural University (GRU)</li> <li>● Cluster Development and Coordination Committee (CDCC)</li> </ul>	
	<b>Principal Production System</b> <ul style="list-style-type: none"> <li>● Weavers</li> <li>● Master weavers</li> <li>● SWCSs</li> </ul>	<b>Sub Contracting Firms</b> <ul style="list-style-type: none"> <li>● Dyers (DY)</li> <li>● Designers (Manual) (DM)</li> <li>● Designers (Computerized) (DC)</li> <li>● Punch card makers (Manual) (PM)</li> <li>● Punch card makers (Computerized) (PC)</li> </ul>
	<b>BDS Providers</b> <ul style="list-style-type: none"> <li>● Cluster Consortia (CC)</li> <li>● Entrepreneurship Development Institute, Ahmedabad (EDI-A)</li> <li>● National Institute of Fashion Technology (NIFT)</li> <li>● National Institute of Design (NID)</li> <li>● Indian Institute of Handloom Technology (IIHT)</li> <li>● Private Designers (PD)</li> <li>● International Marketing BDS providers (IM BDS)</li> <li>● Export &amp; International Marketing Consultants (EIMC)</li> <li>● JSN School of Management Services (JSN-SMS)</li> <li>● Handloom Export Promotion Council (HEPC)</li> </ul>	<b>RawMaterial/Machinery Supplier</b> <ul style="list-style-type: none"> <li>● Zari merchants – Local (ZL)</li> <li>● Yarn traders – Local (YL)</li> <li>● Zari merchants – Surat (ZS)</li> <li>● Yarn traders – Karnataka (YK)</li> <li>● Anna Silk Exchange (ASE)</li> <li>● Karnataka Silk Marketing Board (KSMB)</li> <li>● TANSILK</li> <li>● Tamilnadu Zari Limited (TZL)</li> <li>● Weaving appliance supplier – Local (WAL)</li> <li>● Punch Card Suppliers – Madurai (PCM)</li> <li>● Punch Card Suppliers – Local (PCL)</li> <li>● Jacquard box suppliers – Madurai (JBM)</li> </ul>



**Figure 8.2**  
**Proposed Cluster Map**



## **Logical Framework Approach for the development of Kanchipuram Silk Weaving Cluster**

The Logical Framework Approach (LFA) is a long established activity design methodology used by a range of major multilateral and bilateral donors. It is based on a systematic analysis of the development situation, particularly, the key development problems, and of the options for addressing those problems.

It can be applied in a range of circumstances and to a range of types of aid activity. Although mainly used in the past for the well-established forms of activities, it can also be used for new forms of activity such as program support and macro-policy support. LFA can be used to

- identify and assess activity options,
- prepare the activity design in a systematic and logical way,
- appraise activity designs,
- implement approved activities and
- monitoring, review and evaluate activity progress and performance.

The LFA is analytical, presentational and management tool which can help planners, funding agencies and managers to

- analyze the existing situation during activity preparation
- establish a logical hierarchy of means by which objectives will be reached
- identify the potential risks to achieving the objectives, and to sustainable outcomes
- establish how outputs and outcomes might be best monitored and evaluated
- if desired, present a summary of the activity in a standard format, and
- monitor and review the activities during implementation.

In this section, the logical framework matrix has been designed for the development of the Kanchipuram Silk Weaving Cluster.

**Logical Framework Matrix for the Development of Kanchipuram Silk Weaving Cluster**

Project Description	Indicators	Source of Verification	Assumptions
<p><b>Overall objective (Vision for the Cluster)</b></p> <p>The Kanchipuram handloom Micro and Small Enterprises Cluster will evolve into a globally preferred sub-contract base for silk textiles by means of real and notional differentiation and securing niche market advantages by the year 2020. Kanchipuram will face the new era of competition through Human Resource Development, quality upgradation, product diversification, cost reduction, adoption of social and environmental standards, benchmarking and institutional strengthening.</p>			
<p><b>Purpose</b></p> <p>To promote and strengthen the linkages among the cluster stakeholders with a view to improve the competitive advantage of the cluster and expand the market frontiers for the cluster to products thereby paving way for the cluster to earn better profits and enhance the possibilities of a consortia-led development.</p>			<ul style="list-style-type: none"> <li>• Presence of a favourable policy environment</li> <li>• Continued support from the government</li> <li>• Presence of the attributes like complementarity and promotability in the cluster</li> <li>• Willingness of the cluster stakeholders to participate in the development efforts</li> </ul>
<p><b>Results</b></p> <ul style="list-style-type: none"> <li>• Establishment of common infrastructural and technical facilities which can improve the competitiveness of the cluster with special focus on exports and quality upgradation</li> <li>• Creation of cluster level institutions involving the cluster stakeholders to promote</li> </ul>	<p><b>Cluster level indicators</b></p> <ul style="list-style-type: none"> <li>• Number of institutions providing common facilities in the cluster</li> <li>• Active presence of cluster level institutions like Cluster Development and Coordination Committee (CDCC) and Cluster</li> </ul>	<ul style="list-style-type: none"> <li>• Records of the Directorate of handlooms</li> <li>• Records of the individual firms and cooperatives</li> </ul>	<ul style="list-style-type: none"> <li>• Presence of a favourable policy environment</li> <li>• Continued support from the government</li> <li>• Presence of the attributes like complementarity and promotability in the cluster</li> </ul>

<p>sustainable cluster development efforts</p> <ul style="list-style-type: none"> <li>• Better availability of Business Development Services (BDS) to the all the sections of the cluster</li> <li>• Production of diversified products which are of demand in both domestic and international markets</li> <li>• Enhanced domestic and export market linkages</li> <li>• Growth in both domestic and export trade for the cluster products</li> <li>• Creation of continuous employment opportunities for the artisans of this traditional cluster</li> <li>• Overall growth of the cluster in terms of employment generation, export earnings and brand equity of the cluster</li> <li>• Greater synergies between support institutions and cluster SMEs in terms of brand building, business facilitation, training, export orientation, product development and diversification</li> </ul>	<p>Consortium (CC)</p> <ul style="list-style-type: none"> <li>• Self initiatives by the CC like organizing workshops, programmes on quality assurance, facilitation of participation in fairs</li> <li>• Increase in the number of active weavers and decrease in the number of idle weavers</li> <li>• Increase in the number of firms involved in exports, their export earnings in cash and quantity</li> <li>• Employment generation (in man days)</li> <li>• Market share of the cluster products among the textile products, in general and handlooms in particular</li> <li>• Joint efforts by support institutions and cluster SMEs in terms of brand building, business facilitation, training, export orientation, product development and diversification</li> </ul> <p><b>Firm level indicators</b></p> <ul style="list-style-type: none"> <li>• Savings by means of bulk purchasing efforts of the CC</li> <li>• Quantitative growth in the production and sales of cluster firms</li> <li>• Enhanced earnings from common marketing outlets and from utilization of common BDS providers</li> <li>• Enhanced earnings through participation in fairs</li> </ul>	<ul style="list-style-type: none"> <li>• Records of the CC and CDCC</li> <li>• Records of HEPC</li> </ul>	<ul style="list-style-type: none"> <li>• Willingness of the cluster stakeholders to participate in the development efforts</li> </ul>
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**Activities**

- Development of 'a database on handloom sector for entire state
- Capacity building and training of officials on Cluster Development Methodology (CDM)
- Evolving a consensus among cluster stakeholders on addressing issues through CDM by organizing exposure visits and discussions
- Trust building among cluster stakeholders through issue based pilot activities
- Formation of cluster level institutions like Cluster Consortiums and Cluster Development and Coordination Committee (CDCC)
- Allotment of schemes to facilitate design development, appropriate technology and skill upgradation as well as market development over a three year period
- Establishment of Common Facility Centres (CFCs) for procurement, testing and training and enhancement of access to existing common facility centres
- Promote R&D efforts on product and process innovation
- Sensitization on effluent treatment
- Initiate efforts for brand building and business facilitation by employing professional BDS providers
- Organizing training on export orientation, product development, diversification and value addition

Presence of a favourable policy environment

Continued support from the government

Presence of the attributes like complementarity and promotability in the cluster

Willingness of the cluster stakeholders to participate in the development efforts

<ul style="list-style-type: none"> <li>• Facilitation of product diversification trials <ul style="list-style-type: none"> <li>• Export facilitation activities through special units constituted at the CC <ul style="list-style-type: none"> <li>• Employment of salaried professionals, especially those who shall be competent by virtue of having successfully led Quality Management Systems (QMS) certification, export-oriented societies earlier in the CCs to enhance the efficiency</li> </ul> </li> </ul> </li> <li>• Organizing inter-society benchmarking visits by leaders of different societies</li> <li>• Workshops on export marketing</li> <li>• Organizing product display programmes</li> <li>• Synergizing support under existing schemes by way of grants-in-aid assistance for interventions on a cluster mode <ul style="list-style-type: none"> <li>• Planned joint initiatives by CC for business development</li> </ul> </li> <li>• Mobilizing national and international support service providers who can assist such joint business development initiatives</li> <li>• Encouraging consortia-led interventions with the Cluster Development Agents and the Directorate playing a catalytic role</li> </ul>	<p>-</p>
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## CONCLUSION

The future of handloom industry depends on its capacity to accelerate the pace of diversification/modernization, improve quality and productivity which will help to reduce costs since there is no control over the prices of silk yarn and zari, the main inputs as also the output prices since competition brings down the prices. Technological upgradation is primordial to increase efficiency in production and for product diversification. All this will require concentration on developing the skills of manpower, both entrepreneurs and labor. The range and depth of training programs needs to be expanded and imparted through local institutions. New programs are sure to familiarize the labor with the use of sophisticated technology.

In the future, Kanchipuram will have to prove its competitiveness against other established and emerging locations in the world. Though the market size shall increase, the players competing for the same will increase ' even faster. The global market will mature towards perfection altering the existing parameters of competition.

The cluster linkages of Kanchipuram should be promoted into high degree of dynamism so that linkages for cooperation with other similar clusters are likely to be sustainable and mutually beneficial. This would help them to keep abreast of the latest trends in technology, markets, consumer tastes and designs. Besides, it would help the existing support institutions related to this cluster in developing new ways to help service their members and their target industrial units.

There is a necessity to assist the industry to shift into high value , items, catalyze development of design capabilities for diversification, help expansion into export markets, develop cluster to cluster co-operation at international level, promote technology up-gradation and improve labor productivity.

Being dynamic and competitive is not a one time activity. It is important for some one to keep a close watch on the latest developments that take place especially in an industry that is dependent on exports based on fashion designs, international regulations and fast pace of technology

developments. A clear review for diagnosis then leads to implementation of the solutions through several ways which need to be institutionalized. An association, howsoever futuristic it may be, will not be able to implement all the programs that need be, especially when the type of organization structure and capabilities required are going to be in variance. This calls for the setting up of institutions like Cluster Consortia and Cluster Development and Coordination Committee to steer the industry through global competitiveness. Secondly, industry cannot develop in isolation to the growth of its stakeholders. There is a need to provide thrust to upgrade the skills of weavers and ensure their well being to develop a mutually beneficial relationship and provide conducive environment for growth and development of this traditional weaving cluster. Integrated efforts shall help a great deal to boost the competitive advantage of this traditional Kanchipuram silk weaving cluster and retain its glory in the future.

**Suggested □□□□□ for further research:**

The following areas are suggested for further research,

- ' • Exploratory studies to identify the potential for export markets
  - Study on Expectations of the business buyers i.e., textile retail giants like Pothys, Chennai Silks, etc., from the cluster to strengthen the forward linkages with these channel members.
  - Inventory analysis and production planning for Weaver Cooperatives
  - Performance Assessment of Loom World chain of outlets
  - Viability study of participating in the Apparel Parks and Handloom Export Processing Zone.
  - Training needs assessment for the members of the principal production system of the cluster
- . • Action research on technology training needs, effective methods of imparting technology, measurement of awareness, knowledge and adoption
- Issues of internalization and e-commerce
- Study on competitiveness of Kanchipuram Cluster products over the powerloom goods and products of other silk clusters in India

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**Annexure -1**  
**Status of Child Labour in the Kanchipuram Cluster as on 2004-05**

Issue of child labour is one of the important issues which affected the Kanchipuram Silk cluster. This issue has been so serious led to the discontinuation of a product i.e., the Korvai type sarees, from the product portfolio of the cluster. In the traditional pit looms / raised pit looms used only one elder can sit during weaving. To weave 'Korvai' type sarees, which is a specialty of Kanchipuram, where the border and the body are attached to each other using a special technique which requires two separate wefts to be handled simultaneously there is a need for child labourers to sit and work on looms. In the little space available on the loom at the weaving end, only one elder and a child can comfortably sit to handle the weft for the border. It was also cost effective to employ children in this occupation, since their wages were low compared to that of grown-ups.

But the sad part of the story was that the poverty of the labour community made these children victims to the needs of their parents. The parents started pledging their children for money and sent them to weaving work. Due to the stringent action of the administration and NGO efforts, the child labour problem has been brought under control. RIDE, an NGO working in Kanchipuram identified about 40000 child labourers across the town and brought it to the notice of the administration. Though it was an incredible fact, the district administration probed the issue and initiated measures to eliminate child labour from the industry. Evening schools for the child labourers called 'Nilavoli Palli' meaning moonlight schools were inaugurated and enrolment in the schools were closely monitored with the help of NGOs.

**Table Status of Child labour**

S.No.	Child Labour	Frequency
1.	Male	443 (57.83)
2.	Female	323 (42.17)
	Total	766 (100)

Source: RIDE, Kanchipuram

The table given above furnishes the latest available details on child labour situation based on a street wise survey conducted by RIDE,

Kanchipuram. It is found that about 766 child labourers are still present in the industry, of which 57.83 per cent are male and 42.17 percent are female children. The action against child labour is also supported by the INDUS project funded by International Labour Organisation. A child labour committee also functions with members from Cooperative society, labour department official, doctor, handloom office, one member each along with District collector as the head.

**Table A-2 NGO-wise details SHGs in Kancheepuram district 2005-**

**06.**

Name of Block	NGO	No. of SHGs	Women enrolled	Savings in Lakhs	Age-wise classification of SHG					SHGs aged more than 6 months
					0-6m	6m-1yr	1-2yrs	2-3yrs	>3yrs	
Kancheepuram	CRDS	87	1323	31.79	0	9	13	13	52	87
Kancheepuram	RIDE	675	9500	232.85	1	91	127	100	356	674
Kancheepuram	VHERDS	444	7324	195.01	0	174	25	125	120	444
Kancheepuram	ARIVOLI	344	4531	95.59	2	199	95	37	11	342
Kancheepuram	CARDS	89	1331	<b>223.66</b>	0	26	27	15	21	89
Kancheepuram	Hand in Hand	232	3263	<b>171.30</b>	0	140	81	2	9	232
Kancheepuram	NAARDO	97	1202	<b>22.67</b>	0	46	10	9	32	97
Kancheepuram	STAR	85	1209	<b>145.32</b>	0	16	27	18	24	85
Kancheepuram MC	<b>ARIVOLI</b>	278	4362	<b>96.24</b>	9	18	115	50	86	269
Kancheepuram MC	RIDE	74	1326	31.89	0	20	14	12	28	74
Kancheepuram MC	CARDS	7	85	0.67	2	5	0	0	0	5
Kancheepuram MC	Hand in Hand	152	2465	10.55	36	106	8	2	0	116
Uthiramerur	<b>ARIVOLI</b>	265	3615	106.54	5	42	150	61	7	260
Uthiramerur	Hand in Hand	306	4638	110.19	0	203	62	12	29	306
<b>Sub total</b>		<b>3135</b> <b>(17.23)</b>	<b>46174</b> <b>(17.30)</b>	<b>1474.25</b> <b>(19.38)</b>	<b>55</b> <b>(1.75)</b>	<b>1095</b> <b>(34.93)</b>	<b>754</b> <b>(24.05)</b>	<b>456</b> <b>(14.55)</b>	<b>775</b> <b>(24.72)</b>	<b>3080</b> <b>(98.25)</b>
<b>District Total</b>		<b>18192</b>	<b>266839</b>	<b>7608.69</b>	<b>272</b>	<b>5197</b>	<b>3956</b>	<b>2885</b>	<b>5882</b>	<b>17920</b>

Source: Mahalir Thittam, PIU, Kanchipuram

While employment in weaving does not give enough income for the household, microfinance is emerging as a helping hand. Many women from weaver households are members of Self Help Groups (SHGs). The above table shows the age-wise and NGO-wise classification of SHGs in Kanchipuram district where intensive weaving activity is in vogue. About seven NGOs functioning in the study area have organised 46174 women into

3135 SHGs with an average membership of 15 per group. About 17.23 per cent of the total SHGs in the district function in the study area. Out of the 3135 groups about 98.25 per cent are more than 6 months old. About one third of the groups (34.93 per cent) are found in the 6 months to one year category and one-fourth of them in 1-2 years category, which means that the SHG formation is in its initial stages in the study area. These SHGs have accumulated a savings of Rs.1474.25 lakhs, which is about one-fifth of the total savings in the whole district.

Table A-3 Year-wise credit linkage performance of the SHGs

w £ 0 on	YEARWISE CREDIT LINKAGE PERFORMANCE											
	upto Mar-2001		2001-2002		2002-2003		2003-2004		2004-2005		2005-2006	
SGSY RF	70	15.20	246	64.30	471	101.75	1097	289.75	637	159.25	828	207
SGSY EA	0	0	15	31.82	26	44.56	214	265.97	376	378.19	256	229.18

Source: MahalirThittam, PIU, Kanchipuram

While thrift is one arm of microfinance, credit is another. The special feature of microfinance is to provide credit for both emergent consumption needs as well as production requirements.

The above table shows the year-wise credit linkage performance under the Swarnjayanthi Gram Swarozgar Yojana (SGSY). About 828 SHGs have been credit linked under SGSY Revolving Fund scheme. About 256 SHGs have availed assistance under Economic Assistance category.

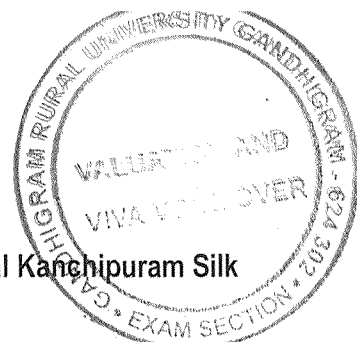
Table A-4: Progress of SHGs as on December 2006

Municipal cumulative upto the month of December 2006					Grand Total				
No. of SHGs	No. of Women	Women		Savings (Rs. In Lakhs)	No. of SHGs	No. of Women	SCs	STs	Savings (Rs. In Lakhs)
		SCs	STs						
3130	48879	6495	331	89244067	18764	275398	98527	2379	768639562

Micro finance through Self Help Groups (SHGs) has been proving itself as an effective tool in the development arena. The above table shows the coverage of poor women through SHGs in the study area. About 48879 women have so far been brought under the fold of SHGs and have been organised into 3130 groups, with an average membership of 16 in a group. They have accumulated a voluminous savings of Rs. 892.44 lakhs through the thrift and savings discipline inculcated in them through the SHG movement.

## Annexure – II

### Case Studies



#### (1.) Zari Testing: An Innovative Response by the Traditional Kanchipuram Silk Cluster

“All that glitters are not gold”, is an age-old axiom, but is very much relevant to silk sarees. The alluring looks of the grand designs on a silk saree drive a buyer clueless of its originality. This has been a major problem not only for the buyers but also for the Kanchipuram silk cluster as a whole, since the sale of sarees with fake zari has affected not only the revenue but the credibility of the cluster too.

In the recent past, Silk sarees with fake zari have entered into the market and are being sold at much cheaper rates, simply because the glitter of silver and copper is being replaced by polyester. Thus, weavers using genuine (original) zari thread are having a threat from the ‘fake zari’ sarees.

#### **Tamilnadu Zari Limited - An ISO 9002 institution;**

Tamil Nadu Zari Limited (TZL), Kancheepuram, was established as a Public Limited concern in 1971 by the Government of Tamil Nadu, under the Companies Act 1956. Its authorised share capital is Rs. 50.00 lakhs and has a paid up capital of Rs.34.40 lakhs. The Government of Tamil Nadu holds the entire shares of the Company. The major objectives of TZL are

- To produce and supply Zari to cooperative handloom weavers’ of the silk industry in the State
- To provide protection to the silk handloom weavers’ cooperative societies in the State engaged in the weaving of silk by making available the required quality of zari at the reasonable rates to save them from stiff competitions of the zari merchants in and outside the State

During the year 2000 TZL’s production unit has been awarded ISO 9002 certification, for the Quality Assurance System.

TZL’s major functions in line with the objectives include - Zari Production, Zari marketing (including Price fixation) and Zari testing

#### **Production of zari:**

TZL commenced its commercial production of zari from 1974 onwards and the entire production of the zari is supplied to various service institutions and co-operatives, Weavers Service Centre, Kancheepuram, Silk Handloom weaver’s co-operative societies, in Tamilnadu under the control of Government of Tamilnadu.

The present production capacity is 7200 marcs per month (One marc = 242 grams). There are two production units - Unit A & B. There are five Gliding

machines in the "A" Unit producing to an extent of 6,500 marcs per month. In the "B" Unit there are two gilding machines, producing 700 marcs per month.

With expanding demand zari marcs with different specifications are also sold to Karnataka Silk Industries Corporation, Karnataka Handloom Development Corporation at Bangaluru (Bangalore) and The Kanhirode Weavers' Co-operative Production and Sales society at Kerala.

#### □□□□□ **fixation for Zari:**

The zari market is characterized by anomalies in product quality as well as price. With a rising demand and stiff competition the private merchants were charging undue prices for the zari and also introducing fake zari. Poor weavers with little technical know-how and money were the victims of this sorry state. With the advent of TZL in the Zari market a solution was worked out to set right the existing market imperfections. One such initiative was constitution of the Centralised Purchase Committee for zari headed by the Director of Handlooms and Textiles, Chennai. This committee meets every month and fixes the price of the zari for the month. TZL sells the zari at the rates fixed by the Committee. By this initiative the competitive pressure is built among the market players, which results in price regulation.

#### **Testing Laboratory**

The unit is having a well-equipped laboratory for testing raw materials and finished product (viz) Gold thread. Apart from this the Zari purchased from Surat by the Silk Cooperative Societies in the state are also tested at the laboratory. There are two major types of testing the zari; they are (i) destructive method and (ii) non-destructive method. Under destructive method of testing, a sample drawn from the zari thread is treated with some chemicals to ascertain its quality. The process involved destroys the fibre, hence the name destructive testing.

#### **' Non-destructive Zari Testing - An innovative step:**

In the recent past, Silk sarees with fake zari have entered into the market and are being sold at much cheaper rates, simply because the glitter of silver and copper is being replaced by polyester. Thus, weavers using genuine (original) zari thread are having a threat from the 'fake zari' sarees. A major problem being faced by the Kancheepuram silk cluster is the non-availability of a suitable method for non-destructive testing of zari used in silk sarees. Presently available testing techniques are destructive in nature and are also time consuming.

In order to solve this problem, TIFAC adopted a scientific approach with the help of IGCAR, Kalpakkam. It has been identified that X-Ray Fluorescence (XRF) Testing Method would be the most Suitable method for Non-Destructive Testing of



Zari used in Silk Fabrics. This technique operates on the principle that "when a sample is irradiated with X-rays, the radiation excites the elements in the sample, causing them to fluoresce. These elements emit their own characteristic X-rays. The intensity is a measure of the element's concentration in the sample".

Accordingly, under this project an exclusive XRF machine with collimated beam and also multiple sample holding mechanisms has been developed. This machine has been installed in "Zari Testing Centre" at Kancheepuram.

Technology Information, Forecasting and Assessment Council (TIFAC) had undertaken a project towards Standardisation of the quality of Zari used in Silk sarees, jointly with M/s Tamilnadu Zari Limited (TZL), Kancheepuram. TIFAC entered into a MoU with TZL, for carrying out this project. Indira Gandhi Centre for Atomic Research (IGCAR), Kalpakkam, Tamilnadu has offered the technical consultancy for this project. In order to build the confidence and credibility among the customers and in the industry about the quality of zari in silk fabrics, testing is very important and much required. Hitherto, for testing metal contents in zari, destructive method of testing has been carried out. Now, the testing of zari samples and zari made fabric are carried out by Non-destructive testing (XRF Analyser), which is a unique one. The technical know-how of the project was jointly developed by TIFAC and TZL with the guidance of the IGCAR.

This project has greatly helped the weaver societies and also individual customers by evolving an effective method to prove the authenticity of zari used in the silk sarees by distinguishing the 'original' from the 'imitation'.

The Central Silk Board (CSB) is planning to bring out a better technology for testing the zari quality, with a view to support the cluster further.

Kanchipuram, being an example of self-initiated Cooperative movement, has built a fort for the cooperatives in the cluster, by centering most of the institutions on the cooperatives. This phenomenon has kept the private sector in the cluster, almost in bay, from accessing the technical, financial and marketing support services. Though some of the services are open to all, practically the private sector never avails them, either due to lack of awareness or procedural difficulties. This feature is also reflected in the Venn diagram analysis, which forms a part of this study. This dichotomy has created an imbalance in the cluster in terms of functioning and market mechanism. The private sector has its own array of problems, the failure to address which shall not be helpful in promotion of the competitiveness of the cluster.

Mr. B.A. Kumar (name has been changed), a young retailer is the owner of a Silk saree retailing outlet at Kanchipuram. He is well educated; having done a post graduation, he has also pursued M.Phil degree. Describing his association with the industry, he said, "We are in the silk trade traditionally. So, even when I got good job offers like teaching, etc., I chose to remain with this traditional trade. Silk weaving symbolizes culture; at the same time it is also a good business to stay with."

"Most of the institutions here are biased towards the cooperatives. Not to blame them, after all they too are government institutions and their affiliation with government managed cooperatives is quite natural. But the *protectionist* attitude adopted by the state towards the cooperatives spoils the level playing field in the market", complained Mr.Kumar.

Elaborating the funding issues faced by private merchants, he said, "While the cooperatives receive cash credit from Kanchipuram Central Cooperative Bank, private merchants rely on the overdraft facilities, stock loans based on value of stock held by them and loans on security from commercial banks. There is no special scheme for prioritizing credit to them. In fact the bankers hesitate to advance loans to silk merchants, since the prospects of the industry appears as a bit dull. So we have no other choice other than usurious private financiers."

Throwing light on the labour problem faced by the private merchants, he said, "In 2005, there was a disagreement between the district administration and the traders regarding wage fixation. The association had approached the Court of Law in this regard. Meanwhile the district administration has been emphasizing on a wage revision meeting, but the association, the issue being *subjudice* has refused to participate in any such discussion. But the district administration had taken up the issue with Directorate of handlooms, which in turn had issued notices to the members of the traders association."

“While the cooperative sector is being protected by the government policies, we, the private traders have to fight for our own bread. There are only a few means through which our issues are addressed. Recently, there was a demand from the weavers for hike in wages. With the substantial losses due to reduced sales, how can we bear the burn of hike in wages? Already due to such undue demands from the government side the membership of one of the traders association has dwindled from 125 to 90. Why should we be harassed more? We have approached the court of law and are hopeful of a judgement in our favour,” he added.

Talking about the problems in exporting the silk fabrics, Mr.Kumar said, “Export of products is not possible in the present form. Production of diversified products requires more investment. If I produce a shirt with Kanchi silk yarn, it will not be durable. Even the blouses stitched with silk are not durable since the fibre does not have the basic capacity to hold stitching. A saree about 6 metres costing Rs.600Q/- if exported, the export levy at this end and the import charges at the other end and the retailer’s margin there will make the cost to Rs.900Q/-. Thus the cost per metre comes to Rs.1500/- . At least two metres are required for the shirt, so the cost becomes Rs.3000/- (\$60/-). Within a month’s time if the silk shirt loses stitch, the name of our country will be affected. For export we need to produce silk cloth without zari to make it cost competitive. CSB advises us to do embroidery on that. But hand embroidery is costly and machine embroidery is not possible on silk since the fibre may be torn when introduced into a powerful embroidery machine.”

Listing some more difficulties he said, “Uniformity of order cannot be assured because each piece becomes unique on handloom, so it cannot be exactly replicated. So there is a higher risk of rejection. The weavers will be hesitant to produce such varieties because they will get only a lesser wage for this. If we agree upon a price with the customer abroad and once additional order comes to be met within the stipulated time, we may have to employ weavers for a longer period, which will be strenuous for him and we may have to pay him higher wages. Payment of higher wages will escalate cost and will not be profitable to execute the order.”

He continued, “Obtaining an export license is not so easy. It involves a lot of procedures. Once we approach them for export license they ask for experience in export, type of product proposed to be exported, the markets for various products, assurance that the applicant will continue to export for 15 years, etc., which poses a difficulty for the merchants.”

Central Silk Board organized EDP training in 1997-98 for 25 persons on handloom, powerloom, dyeing, twisting and designing. About 100 persons applied for the programme and 25 of them got selected based on a written test. The trainees

were also encouraged to set up their own units after the training programme with the assured assistance from the District Industries Centre. The trainees spent about Rs.5,000/- towards the training fee (which was assured to be refunded on initiation of enterprise) and an additional Rs.2,500/- towards other expenses. The trainees after the training approached the DIC for loan. But there were a set of conditions for obtaining the loan viz., land under the title ownership of the applicant, the land classified as non-agricultural, interest rate of 15%, license to be obtained, loans only for new ventures not for any expansion, etc. Thus, except one person who obtained a loan for setting up a few twisting machines, no new unit was started. The CSB convened a follow up meeting but nothing fruitful resulted. The participants could not get their training fee reimbursed since they did not start any activity which was a pre-requisite for reimbursement.

“I wanted to install 10 powerloom machines at the cost of Rs.40,000/- each, but for want of land title in my name I couldn't avail loan assistance,” said Mr.Kumar.

Mr.Kumar represented the gamut of issues faced by the private merchants of the cluster and has highlighted the fact that ignoring the private sector in the cluster development shall not yield desired results. The major points specified were

- • Vantage points must be identified at entry points of the town and information booths on authorized silk traders must be made available there to the buyers
- The intermediate brokers must be kept away from the system by stringent administrative action. But with their political backing these brokers go unscathed and continue to befool the customers by misleading them
- Silk yarn used here is sourced from Karnataka. The weavers in Andhra and Karnataka can use China silk for their varieties. But due to a higher levy on import of Chinese yarn, they consume Karnataka yarn, which affects supply to this cluster.
- Tax exemption should be given to the silk saree merchants as a measure to promote this traditional industry.

### (3) Role of Traders Association in the Kanchipuram Silk Cluster

Hike in the prices of raw materials viz., yarn and zari, lack of availability of silk yarn has been a major problem facing the Kanchipuram Silk weaving cluster. High quality zari, being used in weaving the silk saree, makes the product costlier. The longer duration of production and associated expenses, hike the production costs further. In this scenario, scarcity of raw materials and the levy of VAT and continuous rise in the prices of raw materials have added fury to the fire.

- Three traders' associations are functioning at the Kanchipuram Silk Cluster viz., Kanchipuram Silk Lace Saree Producers' Association, Kanchipuram Silk Lace Saree Small Producers' Association and Kanchipuram Zari Traders' Association.

The main role of association being advocacy, they take up various common issues affecting the traders viz., hike in the levies on the raw materials (zari and kora yarn), fixation of wages for weavers. The association representatives regularly participate in the panel (along with the District Collector, Labour Welfare Officer) that meets every three years to fix wages for the weavers, coming under the private fold.

The trade associations jointly organized a one-day mass strike on 28<sup>th</sup> February 2006, demanding the withdrawal of VAT being levied on the zari and kora silk yarn. Representatives also met the Union Minister for Textiles to ensure supply of yarn to the cluster. "Orders were immediately released to import the necessary yarn by the Ministry, due to the efforts of the association", said Mr. Balasubramanian, Secretary of the producers' association.

The other major problem the cluster faces is the misuse of brand name 'Kanchipuram Silk', invariably for products of other region. "This is a major threat to the industry. Now we have obtained the registration in Geographical Indications registry. Thus a legal protection is available. Still, the lack of awareness among the people has been a major drawback. Now we are planning to take up the issue and sensitise our members. We also plan to work with the administration to mobilize protective action", said Mr. Y.M. Narayanasamy, President of the Small Producers' Association.

Apart from the advocacy role, as a social measure, the saree traders' association runs a dispensary at Ekambaranathar Sannadhi Street, appointing two doctors and nurses. The patients can undergo treatment at a nominal charge of Rs.3/- or Rs.5/-. But the associations are yet to take the lead for other issues like training and creation of common facilities in the cluster, which shall benefit the cluster as a whole and boost its competitiveness.

#### **(4) Hand-in-Hand - Weaving Unit Experiment**

The silk industry in Kanchipuram faced problems both in terms of the system of working - based on the traditional master weaver mechanism and the cooperative model of operations introduced about six decades ago - and the question of sticking to traditional styles. While the weavers in the cooperative fold suffered the problems of delayed supply of raw materials, inability to establish their own weaving units, etc., the weavers in the private fold had the problems of lesser wages, lack of social security and exploitation. Some innovative experiments are essential which can create a paradigm shift in the industry equations. While some interventions can turn out to be path-breaking in a cluster's history, some may fail to sprout. One such attempt is that of Hand-in-Hand's 'Weaving'Unit' experiment.

##### **Origin of the Innovative 'Weaving Unit' Experiment:**

Hand-in-Hand devised an innovative project for weavers to train the handloom weavers under the IHTP project for two months. A batch of 20 members was selected for the training programme, consisting of 16 women and 4 men. About 20 looms were installed at the School (run by the NGO) campus in Putheri Village. The trainees were paid Rs.100/- stipend per day. They were taught about the weaving techniques and different types of weaving in cotton and silk through a master trainer. After the completion of the training programme, the trainees were expected to continue working with the facility on a regular basis. Marketing tie-up was also arranged with Swamy Silk House, Achu Royal Silks and Sree Silks for the produce of these weavers.

##### **The hurdle:**

All was well till the training programme. Later when it came to functioning, it faced a difficulty. They were unable to adhere to the office routine of morning till evening. Since they were used to work at home, they worked at their leisure. The location being away from their homes they had a difficulty with the new system of functioning. Moreover, they found it risky to carry out business on their own, since that may spoil their traditional ties; Hence, the drop out kept increasing, in the weaving unit. The techniques taught in the training were mostly related to cotton weaving, which is not a lucrative option for the weavers, since the wages were very low when compared to silk weaving.

##### **The Result:**

After the persuasion and follow-up by Hand-in-Hand, the weavers started coming back to the unit but it wasn't sustainable. Finally, the NGO handed over the looms and accessories to the trainees for installation at their houses and continue

work. Even with the market tie-ups forged for this purpose, the supply of goods by the weavers is not regular.

**The Decision:**

"The attitudinal problem is a big challenge that hurdles the progress of this industry. A few retailers who came forward to support this venture, will also hesitate to support such ventures because of the bitter experience. Lack of time and interest in any subsidiary activity is also an important reason for the low economic status of weavers", said Mr.Thiagarajan of Hand-in-Hand.

**Gandhigram Experience:**

A similar weaving unit at T.Subbulapuram, Theni district is managed by Gandhigram Trust successfully employing about 30 weaver women. The role of Gandhigram Trust did not stop with mere training or establishment of facility. A wholistic approach was adopted, by supporting the community with its other ambit of services, which had helped in a successful venture. It not only procures orders for the weavers but also coordinates the purchase and welfare aspects of the weavers. They have organised the weavers as SHGs through which solidarity of the group has been ensured. This is a good model to be quoted in this context.

**Other Activities:**

But, Hand-in-Hand doesn't stop with this. They have a training centre at Kanchipuram, for apparel stitching (running since 2004). Any middle school (VIII standard) educated women between the age of 18 to 25 enrolled for the training, is given one month's training in power machine stitching. Confederation of Indian Industry (CII) has arranged for the placement. Every month a batch of 15 women pass-out the training and get placements at garment companies like Celebrity fashions, Intimate fashions at a monthly salary of Rs.2500/- per month. They also get placed in garment units of leading players like The Chennai Silks, Saravana Stores, etc. One such similar training centre has also been established in Sriperumbudur, 40 kms away from Kanchipuram, which has a larger capacity with 40 power stitching machines and about 75 to 80 members could be trained per month.

Hand-in-Hand, right from its inception in 1987 till 2002, was focusing on elimination of child labour from the Kanchipuram silk industry, by actively getting involved in the enrolment campaign of child labourers in evening schools (Nilavoli Palli) under the Indus Child labour project.

##### (5) LOOM WORLD - AH under one roof!

'Misnomers' and bogus cooperatives are prime, among the major problems faced by the Cooperatives in the cluster. Normally, the brokers for private retailers rope in the customers at the very entry points of the city and take away the business. The irony is in many cases the customer ends up with a product of inferior quality. The cooperatives which have a product of better quality, due to the lack of promotional programmes lose their business. Thus, a temple tower (*gopuram*) like symbol was introduced to identify the genuine cooperatives, still due to lack of popularity, customers were still falling prey to the deceptive traders. The main location of retail outlets, Gandhi Road, in Kanchipuram has an array of silk saree showrooms, including those of the cooperatives. A new comer shall be bedazzled and cannot identify the cooperatives amidst the dazzling sign boards of the private merchants. An exclusive campus, where only the cooperatives shall be present, was found as the only solution to the issues.

In this direction, to promote the market of handloom products produced in Weavers Cooperative Societies, the Directorate of Handlooms and Textiles devised an innovative concept called "*Loom World*" chain of retail outlets, which shall serve as a one-stop shop for all wedding purchases. The brand "*Loom World*" was promoted aggressively to popularize the concept among the members of the public.

The first loom world was opened during 2000 at Anna nagar by renaming the existing "Tamilnadu Handloom Cooperative Marketing Complex". Subsequently, three "*Loom World*" complexes were opened at Erode, Coimbatore and Trichy. Besides, the complexes at Eg more & AnnaSalai in Chennai, Madurai, Dharmapuri, Pondicherry, and Kanchipuram were renamed as *Loom world* showrooms. The loom world complexes are functioning in the following locations:

**Loom World -Dates of Origin**

S.No.	Name of the Loom World	Date of Starting/renaming
1	Anna Nagar, Chennai	29.08.2000
2	Egmore, Chennai	27.10.1997
3	Annasalai, Chennai	01.07.1980
4	Erode	21.03.2001
5	Coimbatore	03.09.2000
6	Madurai	01.04.2006
7	Dharmapuri	27.10.1997
8	Pondicherry	23.01.1997
9	Trichy	19.10.2003
10	Kancheepuram	08.02.2003

Source: Directorate of Handlooms, Chennai

The various varieties of handloom products exhibited in the "*Loom World*" showrooms include, Silk and cotton sarees, Chudidhars, Silk and Cotton Dhothies,



Angavastrams (silk towels), shirtings, Lungies, Home textiles such as bed spreads, furnishings, napkins, handkerchiefs, towels and footmats.

#### **Registration of Loom World:**

Applications have been filed for the registration of trademark “Loom World” in class 24 & 25 before the Trademark registry, Chennai. The Certificate of Registration of Trademark is awaited from the competent authority.

#### **Service Charges:**

The member cooperatives who are housed in the ‘Loom World’ complex may have to pay service charges which shall be used for the maintenance expenditure. This is not uniform at all the places. The details of service charges charged at different locations have been listed below:

**Loom World - Service charges**

<b>S.No.</b>	<b>Location</b>	<b>Service Charges</b>
1	Annanagar, Chennai	16.5%
2	Egmore, Chennai	Nil
3	Annasalai, Chennai	20%
4	Erode	3%
5	Coimbatore	3%
6	Madurai	15%
7	Dharmapuri	10%
8	Pondicherry	10%
9	Trichy	Nil
10	Kanchipuram	Nil

Source: Directorate of Handlooms, Chennai

#### **Management of Loom World:**

The Managing Director, Tamilnadu Handloom Development Corporation is monitoring the marketing activities and retains the overall administrative control. The day to day administration is vested with the Convener/Office Manager. In the cases of Annasalai, Annanagar, Egmore and Coimbatore, the staff from Department of Handlooms and textiles have been posted on special terms and their salaries are being borne by the participating societies on a *prorata* basis. In the other cases (except Kanchipuram and Trichy), no Department Official has been posted as paid Office Manager; they manage the affairs as an additional charge. In the case of Trichy and Kancheepuram Loom World complexes, due to the participation of individual societies, no separate Office Manager has been posted. While the salary of sales staff is met by the Loom World in Anna nagar and Pondicherry, in other complexes it is met out by the participating societies themselves. The accounts of the Loom World are audited by the Chartered

- Accountants appointed by the Directorate of Handlooms & Textiles, Chennai.

#### **Loom World, Kanchipuram:**

The 'Loom World', Kanchipuram is housed at Anna Silk Complex, constructed at a cost of Rs.200 lakhs. This is a spacious complex with ample parking space, housing not only the showrooms of all Silk Cooperative Societies of Kanchipuram, but also silk cooperatives from other popular weaving centres like Ami, Salem, Kumbakonam, etc. This arrangement is mainly to facilitate the wedding purchases.

Normally, in a South Indian Wedding, particularly Tamilnadu, purchases are bifurcated into wedding sarees, reception sarees, sarees gifted to close relatives and silk wear for the bridegroom. Kanchipuram sarees with elaborate designs and exquisite borders will be purchased for the Muhurtham or wedding ceremony, a relatively simpler design for reception and economy range for gifting to relatives.

In such a scenario, to give a wider choice to customers, products of all the popular silk weaving centres have been housed in the complex. Moreover some product lines like Silk Dhothis have been discontinued by the Kanchipuram Silk cluster, which has now been taken over by Salem, can also find a place in the sales complex, to fulfill the purchase requirements of the customers. The products of other silk clusters are comparatively cheaper to that of Kanchipuram; hence the budget purchasers can also be happy with the choices.

The complex is located on the main road called Vallal Pachaiyappan Street and is about 250 metres away from the Kanchipuram bus station. It is also near to the Gandhi road junction; hence it can attract customers, even before they enter into the array of silk shops located there.

"It is a nice concept. It reduces our tension. Otherwise we have to scout for varieties all around. It is also not safe to roam around with heavy cash, which we bring for such wedding purchases. We have a wider choice here and above all we get the original stuff. After all, paying this much, and buying for a lifetime occasion like wedding, it is essential to have a satisfaction, which this *Loom World* gives us", said Kamala, a purchaser who has come all the way from Chittoor for the purchases on the occasion of her daughter's marriage.

All is not fine; the local rivalry among traders is creating problems for the Loom World. A bogus establishment called 'Handloom World' has come up in the vicinity with deceptive looks and logo. Efforts have also been taken to increase the height of the nearby buildings in a way to hide the entrance of the '*Loom World*', "All said and done with the passage of time and popularization of the concept through intensive promotional programmes is bound to make the concept of '*Loom World*' a success", said Mr.Jamaluddin, MD, THDC.

**Progress of Loom world outlets - a snapshot**

*(Rs.in lakhs)*

Loom world branch	Sales			Expenses			Profit 1 loss		
	2003 - 04	2004-05	2005-06	2003 - 04	2004-05	2005-06	2003 - 04	2004-05	2005-06
Anna nagar	103.58	113.66	120.06	18.70	15.20	19.58	84.88	98.46	100.48
Egmore	396.00	397.00	331.00	NA	NA	NA	NA	NA	NA
Annasalai	102.83	72.66	86.02	10.71	9.29	12.01	92.12	63.37	74.01
Erode	182.17	144.47	132.79	3.96	3.28	3.06	178.21	141.19	129.73
Coimbatore	196.17	176.61	168.86	4.62	3.77	3.25	191.55	172.84	165.61
Madurai	72.88	44.80	33.23	5.68	6.22	5.72	67.20	38.58	27.51
Dharmapuri	35.69	39.61	36.54	2.10	2.83	3.25	33.59	36.78	33.29
Pondicherry	39.85	30.85	26.65	7.23	7.59	5.65	32.62	23.26	21.00
Trichy	26.97	57.92	55.01	12.56	12.88	11.90	14.41	45.04	43.11
Kanchipuram	221.54	187.52	202.16	NA	NA	NA	NA	NA	NA
Total	1377.68	1265.1	1192.32	65.56	61.06	64.42	1312.12	1204.04	1127.9

Source: THDC, Chennai.

NA

Not

## **(6) Why only sarees... Let us innovate...!**

Babu is in his early thirties, a commerce graduate and member of Kanchi Sri Krishna Silk Marketing Society for a decade. Basically, a designer, he always employed his creativity to innovate new designs for the silk saree. "The computer aided designing has increased the possibilities and helps us to bring out creative pieces of art" says Babu.

Babu has been involved in the area of designing from the days of his childhood, observing the traditional art from the family. When he took up the lead, he wanted to try out technology. "I visit Central Silk Board office. They give us the technical guidance. I have also attended a couple of their training programmes. Thus I got the inspiration to employ technology into the designing area," he said.

Recently, he has installed a computerized designing centre and a computerized design card punching machine at a cost of Rs.2 lakhs, which he sourced from a private manufacturer based at Bangaluru (Bangalore). "This was the Starting point, I should say. Thereafter it has been very easy for us to try out various designs", he said.

He continued, "Before two years, for the family marriage of a Chennai based textile house, they wanted to prepare an innovative gift piece of 12" x 14" size out of silk; carrying the images of Hindu Gods weaved on the silk cloth with zari. I was given the order, and I executed the order winning their appreciation. I retained some of the sample pieces and showed it at my cooperative society. At the same time, Co-optex has approached our society to provide them samples of such gift pieces for their showroom. When my samples were sent, they readily accepted and have placed the order. Now, we are despatching the finished gift pieces to Co-optex, which shall be launched soon by them in their showrooms. These pieces are carrying the images of Gods of all the faiths in the favourite colours of the people of different faith. We are eager to know the market response."

"Each such gift piece shall cost between Rs.120/- and Rs. 150/-, based on the extent of design, which is an affordable price for the normal customers. Unlike the silk sarees, these can attract mass consumers and it is also a symbol of our cultural heritage. We can prepare about 12 such gift pieces in a saree length employing the 480 Jacquard on the loom. There is no necessity for much modification in the loom to execute the production. Repeat orders can give the weavers continuous work and their economy can improve", he added. Such product innovations are very much essential and have to be encouraged for enhancing the competitiveness of this traditional cluster.

Upgradation of technology also has a darker side. Switchover to mechanization, replaces a number of manpower, whose survival is threatened and in most cases leads to unemployment and associated social problems, since most of them are less qualified and unskilled. Handloom industry by itself is labour-intensive and the second largest only next to agriculture in provision of employment opportunities. Hence Gandhiji, the father of our nation, advocated it to be the suitable industry for a populous nation like that of ours, since we have a large pool of unskilled workforce. There have been remarks from noted economists like Dr.C.Rangarajan that the growth in economy has failed to create commensurate employment opportunities in the country. In such a scenario, it becomes imperative to prevent displacement of workers in traditional sectors like weaving, which shall result in problems of unemployment, migration and poverty which shall in turn affect the overall growth of the nation.

Here is a case of a victim, in the Kanchipuram silk cluster, who is a manual punch card maker and faces the danger of survival due to the mechanization of his occupation. Venugopal, aged 33 years, is a higher secondary educated. He is a manual punch card maker. He is in the trade for the past 7 years.

Describing his job, Venugopal said, “I started working as an apprentice with a punch card maker and after sometime I started to practice on my own. First I plot the sketches of the design in graph sheets. Then based on the measurements I punch holes on the cards. I purchase the cards, the connecting strings in bulk, based on requirement. For each card I earn a wage of Rs.2/-. The simplest design shall call for a minimum of 40 cards and elaborate designs can extend the number of cards to even more than a thousand.”

He continued, “Normally I can produce 300 to 350 cards per day and can earn even upto Rs.700/-. This involves not mere punching of cards, but connecting them using the strings and stitching them together to make an array of such a number of cards required for completing the design of a saree. For doing all these, I get Rs.2/- per card.”

“Now some people have introduced machines that shall do this job. Once the design is prepared on the computer, automatically the required numbers of cards get punched in the machine. What we do in a day’s time, the machine does it in half-an-hour. The net result, we go jobless for days. Now at least a few are approaching us with orders, but our future is already in danger”, said Venugopal with sad face thinking about his uncertain future.

## **(8)Exports** பெரிய அளவுக்கு இறக்குமதி செய்ய முடியும்

While the whole Kanchipuram cluster is still skeptical about product modification or export, it was interesting to see a ray of optimism. Yes! It was interesting to find a master weaver who has tried something new and has tried to export the silk fabric for an order that he received from the United States of America. Not only this, he stands apart by also successfully adopting the technology given to him by the Central Silk Board.

Mr.Ganesh, a young master weaver, in his early thirties, belongs to a family involved in silk industry for generations. Recollecting his early association with the trade Ganesh said, “It is quite a natural thing to happen. For generations we are in this trade. I remember to have played at home with the weaving appliances, spindles and the yarn. We used to spin the waste yarn, make sum fun out of that. That is how I learnt the art. Though I was a graduate of History, my basic instinct was with this trade.”

He continued, “My grandfather Mr.Singara Mudaliar is the President of the silk saree traders' association. His active involvement in the industry also inspired me and I chose to be in the trade. After all, this is a symbol of our tradition and I am ' proud to be associated with it.”

Ganesh, being educated and enthusiastic in adopting innovations was introduced to the new technology of 'tub dyeing' by Central Silk Board (CSB). Ganesh himself explains the method of the new technology, “Earlier, we used to sun-dry the dyed yarn. Due to the defect in this method, the colour of the yarn may fade at a later date. In this new method of tub-dyeing, the dyeing is done through steaming process. This helps in spreading of dye evenly on the yarn, better fastening of the dye, lesser wastage and due to efficient use of dye. Distilled water is used in the process for dyeing. This process reduces the expense on firewood and increases the life of the silk yarn.” The technology costs Rs.3,05,000/- (of which the subsidy component is Rs.2,30,000/- and the user contribution is only Rs.75,000/-). , “In the old method, there is no guarantee for colour of the fabric (which may fade at a later date) hence exports weren't possible. Now due to this new method, the doors have been opened for export of Kanchipuram silk fabric”, said Mr.Ganesh.

Ganesh has also exhibited his innovation in another instance. In his own words, “Once I got an order through a friend, for preparing some screen cloth for a customer at United States of America. Curtain cloth in Kanchi silk? My friends were skeptical about it. But I wanted to give it a try. Unlike a saree, about 18” to 19” inches length is sufficient for the screen cloth. So without any zari work we prepared the screen cloth and did some paintings on that using water paint. It came out well

and the customer abroad was satisfied. But the weavers shall hesitate to undertake such jobs, since they will get only a very less wage in the present wage structure. If wages are revised, there is a possibility to produce such innovative home furnishings. I also tried shirting pieces with minimum or no zari work and sold them for Rs.300/- per metre. Even churidhar varieties, I had tried, but it did not work well in the market", he said exhibiting his flair for innovation.

An official of the CSB said, "We work with such master weavers who have a flair for innovation. We are here to assist the cluster with our technical expertise. We prefer to focus on the macro issues like product modification, technology modification, etc. Hence we work with the master weaver community who are capable of implementing the technology and perform a consultative role in the introduction and adoption of technology."

"Not only this, CSB conducts research on the looms and suggests modifications in looms to make the production process more efficient. They also provide testing services. We can ensure the quality of yarn by getting it tested here for a nominal fee of Rs.280/-. Normally, in Kanchipuram we use the 18/20 denier count yarn for weaving. We also get advice from CSB on technical aspects of yarn selection. Earlier, it was mere thumb-rule and experience that determined the ' quality; now, it is all scientific", said Mr.Ganesh, all in praise of CSB.

"Now we are working on the aspects of 'cost reduction', consistency in product quality and improvement in designs, which are the major problems of the cluster. We train these master weavers on innovative technologies and help them in the adoption of the same. Ganesh has been an enthusiastic learner and he is in constant touch with us. He has successfully adopted the dyeing technology which we gave to him. It shall really improve his product competitiveness", explained the official of CSB.

"Since the wage structure is not attractive, skilled weavers are switching over to other unskilled jobs. Now many engineering colleges and industrial complexes provide a wage of Rs.100/- for a day's work to these unskilled labourers, for working in much simpler jobs. The weavers are hesitant to employ their generations in ' weaving, thus it endangers the survival of the art. If it is taught as a supplementary subject in schools, the young talents can be attracted towards the industry. Moreover, the wage structure has to be revised to retain talent. After all it is our heritage, and is it not our responsibility to protect it?" questions Ganesh with a sense of responsibility.

## **(9) Internationalization of Kanchipuram cluster -**

### **An Optimistic Sign of Possibility**

When many agencies are almost writing off the handlooms sector, labeling it as a 'declining sector', one academic research institution from Kanchipuram, is all optimistic about internationalization of the cluster.

JSN School of Management Services, Kanchipuram, has implemented a research project, funded by European Union, under the EU-INDIA Economic Cross Cultural Programme, on select SME clusters in Tamilnadu in the sectors of handlooms, handicrafts, leather and ICT.

Prof.S.Nandakumar, Honorary Director, JSN, said, "Under this project, we have done a context analysis of the Kanchipuram Silk SME cluster, being one of the clusters under study. It is a very traditional cluster, which has been surviving for centuries. But there is a dearth of professional management inputs to the cluster, due to which many good opportunities are not utilized properly here."

He continued, "The recent intervention by Chennai-based trading houses like Pothys, Chennai Silks, etc., is a noticeable development, which has greatly helped in attracting the attention of the market towards the products of this cluster. This new 'channel, if strengthened can help in export of products from this cluster and shall be a major step towards internationalization-of-the cluster".

"JSN has worked with the Swamimalai Bronze icon cluster, which is also a traditional handicrafts cluster, under this EU project. We have attempted to facilitate linkages of this cluster, by registering the artisans of the cluster on our project portal ([www.sme-learn-net.org](http://www.sme-learn-net.org)) which shall enable them for a partner search facility across borders to promote their business. We also organized a 'Videoconferencing event' for the Chennai ICT SME cluster with Finnish ICT clusters, in which the representatives of ICT companies from Chennai had business interactions and presentations with ICT companies of Finland. As a major breakthrough we have taken business delegations from leather and ICT sector for a cluster visit to Italy and 'Finland respectively, under the project, with a view to promote linkages among the clusters", he added.

"The major problem of the SME clusters, as identified by the project, has been the lack of management inputs, which hold them back from business development. If the linkages are developed effectively and necessary training inputs



given to these traditional SMEs, then it shall be possible to carry out similar efforts in the Kanchipuram cluster too”, he said.

“In the case of exports, the cluster has not been able to go on its own, since majority of the manufacturers being SMEs. Their scales of economy and lack of awareness shall prevent them from such export ventures. A wise alternative shall be strengthening the linkages with the big players of Chennai and explore the export market through them. When the test marketing proves to be successful, possibilities of individual exports can be explored”, he suggested.

Recollecting the EU-India ECCP project findings, he observed, “Strong industry associations are quite important to boost the competitiveness of the cluster. In fact, we have observed such an example in the Chennai/ellore leather clusters, where we have worked in our project. Their industry association called Indian Shoe Federation (ISF) works closely with the Council for Leather Exports, the export promotion council for leather. With such an effective collaboration among them many progressive measures are implemented with a great deal of ease to promote the products of the industry. Such an approach is essential in the case of traditional clusters like Kanchipuram.

## (10) Branding P(l)ays !...

*Vastrakala, Swayamvara, Samudrika, Kaviyakaadal, Subamangala, Aiswaryam, Sarvamangala, Parampara, Vivaha, HamsaLekha, Yasholekha, Chitraklekha, Cinderella, Snowwhite, Kodaipookkal, Amritavarshini, Reversible... 50,000 colour, indha colour promise, Aishwarya kolangal, Bhavna, Padmavathy, Pavithra, Prashanthi, Nagasu, Thanga Mangani.*

... All these are nothing but the new *avatars* (incarnations) of silk sarees and skirts. Cling on to the television set, browse through any popular weekly, open the daily newspaper, switch on the radio sets, see the vinyl hoardings on your roads, glittering advertisements featuring beautiful silk sarees, sounding anyone or all of the above names will steal your attention. When *moong dal* and *urid dal*, why, even *idly* batter could be branded, why not a silk saree. Thanks to the marketing mania and the brand fever, what even the grantees were wearing from their days, people rush around to stack a few for their own, all because of the aggressive sales promotion campaign.

The array of textile retail giants - Pothys, RmKV, Nalli, Kumaran, The Chennai Silks, Saravana stores, Radha Silk Emporium, all based in Chennai (some of them having outlets all over the state), have played a very vital role in drawing the attention of public towards the silk sarees, which have not been given the deserved attention all these years.

In all these advertisements, invariably the brand name 'Kanchipuram Silk' is present. Such is the *brand equity* commanded by Kanchipuram, above all its competitor products like Arni, Dharmavaram, Kumbakonam, Tirubhuvanam, etc.

Since the market is homogeneous, product differentiation is low and alternatives are available; branding and product differentiation (through changes in design patterns and colour combinations), have been adopted as the major marketing strategies by these textile houses.

"In fact majority of them are normal varieties that they procure from us. But their tactical marketing works the magic", said a veteran weaver in Kanchipuram.

Not only branding, there were also innovations in the form of value-addition through crystal work, chamki work, hand embroidery, glass work, etc., made to attract the customers. For example, *Vastrakala* of Pothys was marketed as a combination of the north Indian hand embroidery work on Kanchipuram Silk, with a tag line *the sangamam* (literally means blending) *of north and south on silk*.

Intense rivalry among these textile giants also resulted in creation of some world records. While it was longest silk saree recording the 5000 years of Indian

history (from the Stone Age till date) on a silk saree by Pothys, it was the saree with 50000 colour shades from RmKV. Swayed by this wave, Co-optex (the apex of Cooperatives in Tamilnadu) also came out with a 50,000 coloured saree and recently its summer collection has been branded as *Kodai pookkal* which carried the designs created by the National Institute of Design, Ahmedabad.

While RmKV introduced the Sangam literature concepts-based sarees in the name of *Kaviya Kaadal pattu*, the competitors came out with similar theme based ones like *Lekha collection*, *Parampara*, etc. RmKV also won the credit of reviving the 'almost written off silk skirts (*pattu pavadai*), by introducing the *Cindrella pavadai* and *Snow white pavadai* featuring the fairy tales of Cindrella and Snowwhite on the borders of a silk skirt. One other path breaking introduction of RmKV was the *two-in-one* saree. Till date it is a puzzle even to many of the weavers that how was that possible to weave two different colours on both the sides of a saree.

Even the mythological stories, with scenes from epics like *Ramayana*, *Mahabharatha* and *Bhagavatha* found a place on the *pallu* of the silk sarees, but due to the sentiments, women were not very much convinced with wearing a saree featuring the images of god, on which they may have to sit. So the line received a lesser response. The other varieties which came up from RmKV were the *Muhurtham* collection i.e., wedding silk, featuring historical monuments like Tanjore temple, Valluvar Kottam, etc.

With every festival, these people come out with some new concepts to attract customers. Since heavy expenses are incurred on popularizing these brands, the products are priced at premium rates. But sure, they are successful in drawing crowds into their counters. The 50,000 colour saree shall be a showpiece, because it may be beyond a common man's reach, but he can choose a saree from one of the 50,000 shades for his budget, out of the *Indha colour promise* (meaning a saree of the chosen colour is promised) collection. *Skimming pricing* is often a major pricing strategy adopted for such products.

It is also interesting to note the way in which the secrecy of the designs are maintained. Normally, for every design, the design punch cards are prepared. Here lies the secret. The mind-boggling numbers of cards, ranging in some thousands, are given to the weaver and weaving happens under strict supervision. Along with the finished piece, the cards are taken back, to ensure the safety of designs.

Some of these Chennai-based retail giants have also established purchase offices in Kanchipuram and contractual relationship with few master weavers on whom they confide with. They hand over the job to the master weaver, who in turn gets it done through the weavers attached to him.

“They extensively use the brand name of Kanchipuram, but some of the works are done at Arni, but sold under the brand *Kanchipuram*. Finally we are the losers”, complained a few weavers at Kanchipuram. An effective implementation of the protection ensured by the recently obtained registration under Geographical Indications Registry shall be a viable solution for this problem.

Whatever, there is no doubt that these efforts have proven the height of brand equity enjoyed by the *Kanchipuram* cluster in the minds of people. The cluster should gear up itself to gain more by strengthening the relationship with such big traders, which may even open up the export market for the cluster.

(11) Geographical Indication and Silk Mark - Bouquet of Protection & Ambiguity

Kanchipuram silk has recently obtained registration in the Geographical Indications Registry under the Geographical Indication of Goods (Registration and Protection) Act, 1999. This registration ensures protection to the Silk sarees produced at Kanchipuram. Any act of violation, in terms of selling sarees of other origins as 'Kanchipuram Silk Saree', shall invite legal proceedings under section 42 (2) of the Geographical Indication of Goods (Registration and Protection) Act, 1999, with a liable punishment of imprisonment for a term which may extend up to 3 years with fine. Such an offence is also punishable under Sec.420 of the Indian Penal Code.

*A geographical indication identifies that the particular product originates from a definite geographical territory. It is used to identify agricultural, natural or manufactured goods. The manufactured goods should be produced or processed or prepared in that territory and should have a special quality or reputation or other characteristics.*

Indian silk for the first time, has acquired a logo in the form of silk mark for its brand promotion. This has added significance in the present global silk scenario where no other silk producing nation has such a distinct mark to identify the original silk fibre.

*Silk mark guarantees '100% natural silk' in all products under a Silk Mark label. This means that a Silk Mark product contains only pure silk in warp and weft in its base fabric but allowing ornamental zari/thread work in paliu, body or border as extra warp or weft at loom or post-loom stage. Silk Mark offers safety and security to the consumers in respect of fibre purity in the product.*

Silk Mark covers all silk products - primary, intermediate and finished silk products viz., raw silk, silk yarns, silk fabrics, silk sarees, silk made-ups, silk garments and silk carpets.

The Silk Mark logo is a registered trademark under the Trademark Authority of India. The logo is the artistic depiction of silk moth emerged from its cocoon and transformed from 'pupa' to 'butterfly'. Silk Mark Organisation of India (SMOI), a registered society sponsored by the Central Silk Board, Ministry of Textiles, Government of India operates the Silk Mark Scheme. Silk manufacturers, silk manufacturers, silk traders (both domestic and export), companies and individuals of repute can become the members of the Society. Permanent members representing Central and State Governments and members elected by the general body, as per the bye-laws, constitute the Committee of Administration (COA), which manages the affairs of the Silk Mark Organisation. SMOI is the nodal agency for the generic promotion of silk and also for providing the export utility services. Initially the scheme was implemented by CSB.

Though both *silk mark* and *Geographical Indication* are offering protection to the products of Kanchipuram Silk Cluster, there exists a cloud of doubts about their effectiveness.

The silk mark, talks only about the yarn and is absolutely silent about the zari, which is a high value component of the silk saree. There are also apprehensions among the cluster members that a retailer may sell a saree with fake zari, since *silk mark* gives the necessary credibility for the product. Even the educated customers are not well aware of this technical distinction. But in this case, the only solace is the 'Zari Testing Centre', which can help in protecting customers' interests and also that of the industry.

In the case of *Geographical Indication* (GI), the ambiguity is of a different nature. The GI offers protection to the goods produced in a particular geographical area. In the case of Kanchipuram, this geographical area has become the point of confusion. Earlier, weaving activity was intense in the town limits and it was also present in the surrounding villages to an extent of 5 kms radius. Now due to

- modernization and changes due to growth of the town, the weavers have moved out to locations beyond the city limits. Even the housing colonies of weaver cooperative societies are located about 6 to 7 kilometres away from the town. To the South west boundary of the town at about 8 kilometres distance, the administrative limits of Kanchipuram District ends and that of neighbouring Tiruvannamalai District begins. But practically, till about 12 to 13 kilometres distance in this direction, Kanchipuram sarees are woven. So in the letter and spirit of the GI registration, there is ambiguity that whether these areas shall be considered as the production limits for the original products. This is a major challenge before the administration during implementation. Moreover, GI being in its initial stages, even the producer community is yet to become fully aware of the concept. The Kanchipuram Silk Saree Small Producers' Association is planning to sensitize the production community in this regard.

- Presently, the administration is implementing an auto campaign in Tamil,
- Telugu and English in the market place i.e, Gandhi Road where the silk saree retail outlets are clustered, A pre-recorded audio with a *caveat emptor* message, is played continuously. But the irony is that the effort often gets unnoticed amidst the busy and noisy market scene. Hence, pamphlets are also circulated with the same message to sensitize customers. But, sustained efforts over a period of time may yield good results.

## **(12) Creativity and Innovation - Beyond the boundaries of technology**

Mr. Balasubramanian, a veteran master weaver, is a septuagenarian and the Secretary of the Kanchipuram Silk Lace Saree Manufacturers' Association. He has a wide knowledge and experience in the trade, since he has hands on experience in almost all the aspects of silk saree manufacture. Behind his polite and simple exterior lies a fierce dynamism and aptitude to learn the recent developments in the trade.

His career is multifaceted. He had been a salesman in the KVI Board outlet, weaver, retailer, office bearer of the trade association. Fascinated by the silk trade, he chose his career in the Kanchipuram silk industry. "I have even participated in the exposure training, organised for the weavers, by the Government of India, in my early stages of career and traveled to Kashmir for learning about the silk cultivation", he said.

Explaining the speciality of Kanchipuram Silk, he said, "The Kanchi silk is distinguished by the quality of silk, the sheen and weight. This is due to the careful selection of quality yarn. Skilled master weavers prefer to buy silk from Chitlagutta in Karnataka, which is more expensive and is of a better quality. This is attributed to the water used during the processing of the cocoons. But the new breed of weavers are not very particular about these aspects."

Weaving is a unique art which requires lot of dexterity. Skilled designers and weavers have brought complex designs on the weave, even much before the advent of technologies like computer aided designing. Balasubramanian, who always had an instinct in him for innovation, has tried creating innovative designs on the silk sarees.

In his own words, "About 15 years back, we have successfully created the portrait of *Meenakshi Thirukalyanam* (Marriage Scene of Goddess Meenakshi Devi) on the pallu of a silk saree. This we did for a customer in Malaysia, to whom we supplied the saree through his local relative in Kanchipuram. The piece was so enchanting that we created a replica of the pallu alone and kept as a model for us."

He hasn't stopped with this. He has also created a unique silk saree with words woven as design across its breadth. About this he said, "We did it for a customer from Andhrapradesh, who wanted to present the saree as an offering on the birthday of a woman ascetic, whom he revered. He wanted us to weave the words meaning 'Mother' in Telugu and English. Since there was ample space available, we decided to weave the same in four languages - English, Tamil, Telugu and Hindi. He liked the piece". Creativity and innovation has no boundaries. Yes! It sounds pretty real while seeing this master craftsman in action.

"Because of the quality and sanctity associated with the silk saree, people from various corners flock to Kanchipuram, a breed apart of all its competitors, for their major purchases like marriage. But our younger generation does not find this industry fascinating, since the prospects are failing. The problems of rising raw material cost, demands for high wages, use of fake zari, accumulated stocks and failing markets are looming large. Government must intervene to save this traditional

cluster from withering away”, concluded the veteran, worrying about the future of this traditional industry.

Annexure - 111

### **Role of Karnataka □□□□ Marketing Board in Kanchipuram Silk Cluster**

KSMB started its branch office at Kanchipuram in the year 1980. It works with thin staff strength of three, including\* the Branch Officer. Karnataka supplies about 3000 tonnes (30 per cent) of raw silk used for silk cloth weaving in Tamilnadu, since there is a deficient supply in the state. The thin kachcha silk used for weaving and 13/15 to 20/22 variety yarn with fine quality threads used in traditional silk saree weaving are produced in Karnataka. The KSMB fills the gap in supply of silk demanded by the Tamilnadu silk market. The silk weavers of Kanchipuram, Kumbakonam, Ami and dhothi weavers of Salem depend upon the quality yarn from Karnataka to weave finer pieces of silk.

Mr.Paramandam, the branch manager of KSMB, Kanchipuram on the silk yarn says, “the production locale is a major determinant of the quality of the yarn. The yarn from Kolar and Mysore districts differ in quality from that of the ones from Bangalore district. The yarn from Chitlagatta and Kollegal is better in quality and costlier than that of the varieties from Ramanagaram and Kanakapura. In collaboration with Central Silk Board, KSMB ensures the supply of quality silk yarn by adopting stringent quality measures.”

“KSMB being a government agency participates in the auction for procurement of silk and protects the interests of sericulturists and weavers”, he added.

To keep the price of yarn under control, KSMB maintains a minimum stock of 100 to 150 tonnes of kachcha and twisted yarn to ensure supply even when there is a sudden spurt in demand.

#### **Salient features:**

- KSMB offers silk at a lower price than TANSILK and other private vendors
- The silk yarn from KSMB with a better winding quality helps in reducing wastage from 2% to 5% thereby saving Rs.20/- to Rs.100/- to the weaver
- Due to a better twist and tensile strength, the quality yarn from KSMB doesn't get cut during weaving and helps a finer weave
- The kachcha and twisted yarn required by Tamilnadu Zari Limited for production of quality zari is supplied by KSMB.



To meet the administrative costs a 2% margin is charged on the price of silk yarn by KSMB.

The board also offers the following discount for the cash purchases (as on August 5, 2006)

S.No.	Quantity	Discount per kg (Rs.)
1	Upto 200 kgs	Rs.7/-
2	Above 201 kgs	Rs.10/-

Indent facility for direct purchasers: Individual weavers who directly wish to procure from KSMB can place their orders and get quality yarn from KSMB within 48 hours. An additional charge of Rs.20/- per kg will be levied on such purchases.

**Special Scheme for TANSILK.** For the purchases made by TANSILK special discount schemes are adopted by KSMB since the purchases are made in bulk. A minimum credit period of one week is allowed for TANSILK. For the settlements made within a week's time, a discount of Rs.8/- per kg is offered treating it as cash sales. But normally TANSILK takes 30-40 days for settling its dues. With a view to better customer relations KSMB doesn't charge any interest on these delayed payments-.

KSMB offers goods at credit to its individual customers too within 48 hours on submission of a bank guarantee or a Fixed Deposit Receipt in the name of KSMB. Based on the credit period extended applicable interest rates are charged as per the following schedule:

S.No	Credit period	Rate of Interest
1	Within 30 days	7% p.a.
2	31 - 60 days	9% p.a.
3	61 - 90 days	12% p.a.
4	91-180 days	12% p.a. + 2%*
5	181 + days	12% p.a. + 5%*

\* Penal interest

The administrative overheads are met with the charges of Rs.30/- per kg levied on purchases of individual buyers. The salaries of staff members are met by the KSMB, Bangalore.

Recently the Moll with TANSILK has come to an end, which has not been renewed so far. TANSILK has started procuring silk yarn from production centres within Tamilnadu hence the Moll has not been renewed.

Earlier KSMB was the only authorized agency to supply yarn to the industry. But as a policy decision in 1996, private merchants were also allowed to enter into the market, which has very much affected the business prospects of KSMB unit in Kanchipuram.

Mr.Paramanandam feels “the major threat to the Kanchipuram Silk industry is the high prevalence of fake zaris. With the increasing awareness about zari testing, a recent initiative to a great extent the threat has been checked. Still the outside consumers are yet getting cheated. It is a sad fact that weavers and merchants themselves are promoting fake zari use which will gravely affect the credibility of the product in the market.”

### Silk Conditioning & Testing House

- The Silk Conditioning and Testing House (SCTH) was established in 1992 at Kanchipuram, by the Central Silk Board, Ministry of Textiles, Government of India, with a view to ensure transaction of quality silk to the Kanchipuram Silk cluster. Its main purpose was to facilitate the Anna Silk Exchange procurement process by testing the yarn procured by them. Earlier SCTH was located in Gandhi Road (the prime locale of the silk market in Kanchipuram). With the relocation of Anna Silk Exchange, it is now housed on the land leased from Arignar Anna Silk Exchange at Sirukaveripakkam. The infrastructure of the present premises has been erected by its own sources. It was installed on a 'Build-Operate-Transfer' basis. But the possibility of transfer is bleak since the operations involve too much of technicalities and calls for professional training and qualification.
- Earlier, Anna Silk Exchange relied on the judgement of a few expert weavers, who determined the quality of the yarn with their in-house traditional knowledge. But these days it procures yarn from the producers in the market centre (located within its campus) for procuring yarn, which is conducted three days in a week (Monday, Wednesday and Friday). All the yarn procured there is tested in the SCTH to determine its quality. Based on the results given by SCTH, the procurement prices are fixed for the yarn.
- The array of services offered by SCTH includes - Testing services, R&D, Training services
- **Other services.** As stated earlier, yarn testing is the prime service provided by SCTH. Apart from this they also perform zari testing, twisted silk reeling/testing, fibre analysis (to test whether it is original silk yarn). The testing of yarn is a regular feature of the SCTH. Every morning of the transaction days the yarn that comes to Anna Silk Exchange is tested at two stages by SCTH as detailed below:

#### **Preliminary visual examination**

- > The staff members from SCTH conduct visual examination of the yarn and determine the factors of appearance, strength, colour, texture, quality, etc., on the predetermined scales.
- > A sample of five *ladis* (about 400 gms) is drawn at random from each lot and is weighed.

- > The testing capacity of SCTH is 30 lots per session. Hence the samples are tested in batches.
  - > All the samples are tested here for average size, size deviation, winding break and maximum deviation
  - > First the samples are winded in bobbins for thirty minutes after which the winding break of the yarn is studied
  - > Then from the bobbins 10 *kilchas* are drawn in the wrap-reel machines for 200 revolutions (1.125 metres per revolution) for *blacher* variety and 400 revolutions for multi-end variety for further analysis. At this stage itself the multi-end varieties are graded (for subsidy incentive of Rs.100/- per kg). The leftover yarn in bobbins are rewinded and handed over back to the seller members later.
  - > The *kilchas* thus drawn are twisted manually and tested using a special balance. Calculations for finding out the average size and maximum and minimum deviation are done using special software. Simple mean and standard deviation are used in the process of calculation.
  - > A minimum of 2 to 2 % hours is required for testing a batch
  - > The testing charges of Rs.20/- + Service tax of Rs.12.25% and 5% levy are charged by SCTH. A higher fee is charged for testing the non-members of ASE.
  - > When there are more lots in a transaction day, the results are given in batches to facilitate auction of the yarn.
- 
- **R&D Services:** Being a specialized agency with qualified people in textile technology the SCTH is conducting constant research and development in the process of handlooms and comes out with cluster specific solutions to the problems facing the Kanchipuram cluster.
  - **Innovative Compressed Pedal looms:** Weaving in a handloom is a highly strenuous task, since it involves lot of physical labour to work in looms. That too in a niche product like Kanchipuram silk, which is a *magnacarta* of craftsmanship, requires critical attention to details to weave a finer piece of silk. The strain of operating a *jacquard* loom limits the weaver's capacity to produce more. To overcome this difficulty, the SCTH has introduced CSTRl handlooms and compressed pedal looms, which have the special features of easy operation as well as, it will help in preserving the tradition of hand weaving. In particular, the compressed pedal loom helps in easily lifting the jacquard loaded with the punch

cards with detailed designs with little effort by the weaver. Such a technology transfer from lab to land is a major step towards building the competitiveness of the cluster through innovation in production process.

**Modification of dyeing units:** ‘Kanchipuram Sari - Don’t Wash’ is a common axiom popular with any woman owning that saree. “This is the effect of bad dyeing”, says the SCTH R&D team. “We have now developed a dyeing process with the help of steam, which will help in better fixation of dye on the yarn. Now, the silk saree is also wash and wear”, says SCTH. “But the use of quality dyes is a must to ensure this”, they added. It is good news that this technology comes with a subsidy of 75% and it costs only Rs.3 lakhs. “Only we expect them to contribute 25% of the total cost and installation of the equipments. We can give them to technology, train them and provide them technical advice.”

**Training on Multi-end reeling technology:** The SCTH has recently imparted training to 25 men on Multi-end reeling technology. It was an innovative and effective method of reeling silk yarns. But out of the 25 trainees, except one others had no background in the business. So the training did not benefit them much. But, the people in business found this to be a viable technology, learnt it from them and have started using it. Thus the purpose of the training has succeeded by the dissemination of knowledge and its successful adoption by a different group. “The main problem in this cluster is that people due to competition do not come together in groups. Thus the transfer of technology is obstructed. We are encouraging them to come together in groups, so that the dissemination of knowledge becomes easier.”

**Training programmes:** With a view to disseminate the knowledge to the cluster and address cluster specific issues, SCTH organizes training programmes for the weavers, dyers and designers. The training programmes include field visits, awareness and technology upgradation programmes.

**Shade card:** The colour of a saree is one of the major attractions to a silk saree. The customers are very particular about colours, since silk sarees are a symbol of pride. But the choice of right colour was a challenge to the dyers and weavers. SCTH through its R&D efforts has introduced shade cards to identify various brilliant colour combinations, which can speak the common language of the minds of customers, dyers and weavers.

**Design Collections:** Product differentiation in silk sarees is very restrictive. Being a homogenous product in quality, the design and colours are the possible differentiation between one piece and another. Traditionally there are designers

who developed designs for silk sarees drawing inspiration from the temple sculptures. Hence the sarees designs had the repeated designs of temple motifs, peacock and mango designs. Earlier, SCTH was publishing designs developed by them through priced booklets to its members. With the development of information technology Computer Aided Design (CAD) is the order of the day. Keeping this latest trend in view, the SCTH is now using ICT to create novel designs for weave and gives to its members in the form of CDs (four per year) at a cost of Rs.400/-. “The efforts do not stop with this, we also train the designers on the software and impart the technical know-how to them”, say the SCTH team.

# **Anna Silk Exchange**

Sirukaveripakkam, Kanchipuram.

A fine piece of silk saree that dazzles our eyes is a combination of silk yarns reeled, conditioned, dyed and weaved. The silk worm rears the silk in the form of cocoons, which is reeled as yarn (the basic silk fibre), gets dyed in different colours, then woven in beautiful designs as a saree.

## **Genesis of Anna Silk Exchange**

Till 1991 the Kanchipuram silk cluster depended on the reelers, who were directly enrolled as members of TANSILK for the yarn purchase and also the agencies like Karnataka Silk Marketing Board apart from the few private yarn sellers in the local market. This resulted in uncertainty in terms of price and supply for the buyers and harassment of the reelers by merchants. Hoarding and black marketing also were not uncommon. To put an end to this trauma, the state government decided to put up a Silk Exchange in Kanchipuram, the dynamic hub of silk weaving and have a regulated market. This resulted in 1991, as an establishment called Anna Silk Exchange (ASE) headed by a Deputy director and a team of 13 staff members including Assistant director (2), Inspectors (2), Junior Inspectors (2), and supporting staff (4) was incorporated in 1991 under the direct control of Commissioner, Department of Sericulture, Anilmedu, Salem. An Assistant Accounts Officer from the treasury department, assisted by an accountant and an assistant, takes care of the monetary transactions of the silk exchange.

## **Main functions of Anna Silk Exchange**

The main functions of Anna Silk Exchange include

- Holding regularly regulated market for silk yarn
- Facilitation of the silk exchange process
- Providing demand information for seller members
- Providing warehousing facilities for seller members
- Fixing of floor prices
- Conduct of auction
- Facilitation of silk yarn testing, compilation of the results and due display
- Provision of counseling to reelers on the aspects of production and market demand
- Collect the auction price from the buyer members and ensure prompt payment of cheques to the seller members

## **The Silk Story**

The silkworms are reared on the mulberry leaves. The leaf protein is the base for the silk protein production. The silkworm has silk glands, in the place of the salivary glands. After a processing of 25 days in its glands to get into the pupa stage and form a cocoon, the larval worm throws out the silk fluid as a jet through a special duct called *spinneret*. This fluid when comes into contact with atmospheric air becomes the golden fibre of silk. It takes 48 days for the worm to spin the cocoon completely. This silk fibre consists of two components called *ceresin* (the coating material) and *fibrosin* (the core material of the fibre). When the cocoon is boiled in hot water the ceresin softens and the fibre is reeled. These filaments are thinner and do not have the tensile strength, hence, about seven to fourteen cocoons are cloistered and reeled to get the desired *denier* of silk yarn (900 metres of filament weighs one gram whose ten times is a denier). E.g. When eight cocoons are reeled together each capable of giving 2 deniers of fibre will result in production of 16/18 denier variety. The other varieties of yarn include 19/21, 22/24, 25/27, 28/30 deniers and charka. Of these 28/30 and charka variety are high denier varieties and are rough, hence they are not used in saree weaving. These yarns are further classified into basin, multi-end and charka varieties. Most of the production is in basin variety, which finds wider usage in Kanchipuram saree weaving. For multi-end variety, which has been categorized as a cottage industry product, a subsidy of Rs.100/- per kg is given, provided it is adjudged as 'B' grade or above on testing.

## **Membership in ASE**

The exchange has a membership of 83 reelers as seller-members and the buyer member is TANSILK. Though membership is open to private buyers there had been no enrolments so far. The seller members have to be registered with the Department of Sericulture in their respective districts and have to get a passbook from there to be produced in the exchange during auction. They can become a member by paying an entrance fee of Rs. 116/- (one time fee) to the exchange. Every year for renewal of membership Rs.60/- is to be paid. The members thus registered become eligible for various services offered by the exchange. The seller-members are from the places including Dharmapuri, Palakkod, Pennagaram, Krishnagiri, Hosur, Salem, Vaniyambadi, Coimbatore, Theni, Pudukkottai and Thenkasi.



## Membership Benefits

The registered members of the exchange become eligible to participate in the auction market held on Monday, Wednesday and Friday in every week. “Though we are ready to hold the auction market everyday the members prefer to transact only in the alternative days”, said Mr.Mohan, Deputy Director, ASE. “The members who bring their lots for sale are given free warehousing till two transaction days and can store their produce till 15 days in the warehouse at a minimum charge of Re.1 per kg per day”, he continued. “We provide demand forecast for the month to the members enabling them to plan their production accordingly. We also arrange for testing services for the yarn with the Silk Conditioning and Testing House at a minimum cost of Rs.22.50/-. We provide the test result information to the buyers and sellers to determine the price for auction. Moreover we ensure the minimum purchase price by fixing the floor price as obtained from Ramnagar Silk Exchange, Karnataka. With our tie-up with TANSILK a definite purchase for the stock is ensured and the liberty to take back the stock if the price is not conducive is allowed to the seller members. We also provide counseling on production and quality aspects based on the test results and market conditions”, he added.

## Functioning of the Exchange market

### Stage 1: Entry of goods and inspection:

- The seller members (reelers) bring the yarns in lots (a maximum of 40 kgs in a lot) to the exchange.
- They obtain the gate entry and registration after which they get the exchange card
- Then the silk is transferred to the concerned section for further processes
- On production of their passbook for identity the lot is inspected by the Silk Inspectors and Junior Inspectors of ASE, weighed and given a serial number.
- A dummy number is simultaneously allotted for the lot to preserve the secrecy of identity and to avoid any undue influence during testing.
- A lot, which is more than 15 days old, is not accepted for sale in the exchange, though the shelf life is a few months.

### Stage 2; □□□□□□□□□□ visual examination

- The staff members from SCTH conduct visual examination of the yarn and determine the factors of appearance, strength, colour, texture, quality, etc., on the predetermined scales.

- A sample of five *ladis* (about 400 gms) is drawn at random from each lot and is weighed.
- With the assigned dummy numbers, the lots are taken to the SCTH for detailed testing.

### **Stage 3: Detailed Examination at SCTH:**

- The testing capacity of SCTH is 30 lots per session. Hence the samples are tested in batches.
- All the samples are tested here for average size, size deviation, winding break and maximum deviation
- First the samples are winded in bobbins for thirty minutes after which the winding break of the yarn is studied
- Then from the bobbins 10 *kilchas* are drawn in the wrap-reel machines for 200 revolutions (1.125 metres per revolution) for *blacher* variety and 400 revolutions for multi-end variety for further analysis. At this stage itself the multi-end varieties are graded (for subsidy incentive of Rs.100/- per kg). The leftover yarn in bobbins are rewinded and handed over back to the seller members later.
- The *kilchas* thus drawn are twisted manually and tested using a special balance. Calculations for finding out the average size and maximum and minimum deviation are done using special software. Simple mean and standard deviation are used in the process of calculation.
- A minimum of 2 to 2 1/2 hours is required for testing a batch
- The testing charges of Rs.20/- + Service tax of Rs.12.25% and 5%levy are charged by SCTH.
- When there are more lots in a transaction day, the results are given in batches to facilitate auction of the yarn

### **Stage 4: Publication of test results**

- Three copies of the results are prepared; both buyer and seller are given a copy each and one is retained for file purposes.
- The results are also displayed in the notice board to enable the buyer to know the product quality in advance

### **Stage 5: Auction process**

- The floor price of the yarn is determined based on the closingpriceobtained from Silk exchange located at Ramnagar in Karnataka.

The buyer-members (other than TANSILK) remit the amount equivalent to the cost of silk to be purchased and obtain token

The buyer-members (TANSILK representative and its members) and seller members assemble at the auction table along with the officials of ASE

Each lot is called based on serial number and the relevant test results are read out aloud

The floor price is also announced by the ASE officials

The buyers visually examine the lot

Based on the results of SCTH and their demand buyers bid a price

The lot is sold to the most competitive bid in the auction

Once the price is agreeable for both the parties the deal is struck and the next lot is called for auction

A bill is obtained by the seller as well as the buyer on confirmation of auction purchase

In case if the seller feels that the auction price is not favourable he has the choice to take back the goods or can store it in the warehouse for two transaction days free of cost (to a maximum of 15 days paying Rs.1/kg/day)

- # The buyer then remits full silk cost with market fee and gets the release order (In case of TANSILK payment is made the subsequent morning)

#### □□□□□ **6: Settlement of money**

The final price fixed for a lot is noted down and the entries are made to that effect in the passbooks of the reelers

Cheques in the name of the reelers are prepared and issued by the authorities. A charge of Rs.2/- is collected for issue of cheques. A special arrangement made with Indian Bank allows encashment of the cheques issued by ASE at 14 designated Indian Bank branches across the state. This helps in safety for reelers who travel back to their hometowns. Moreover the settlement is made by TANSILK the next morning at 10 am and the money is available in the current account of ASE at 10.30 am for honouring the cheques presented by the reelers.

- # Both the buyers and sellers have to pay a levy of 0.75% of the transaction value as market fee, which is deposited in the account called *Sericulture Development and Price Depreciation Fund*. This fund is used for various activities towards the benefit of the members.

The buyer is finally given an authorization from section and gate and the goods are released from the exchange

#### Problems faced:

- While commenting on the process of changeover from traditional method of yarn testing to the scientific testing at SCTH, Mr.Dhanapalan said, “It was a challenge to make the reelers believe that this is a reliable method. We had to make it mandatory to get the yarn tested. But after an initial icebreak they realized it to be a better method. It is rather interesting these days that they themselves insist on testing to get a better price for their high quality yarn”.
- “We are offering counseling services to reelers. But, at times the reelers send their agents/representatives for the auction. When the feedback is given to them, it does not reach the reelers, hence the problem continues”, says Mr.Mohan. “But we don’t stop with that through our extension workers of the Department of Sericulture we persuade them to produce better quality yarn as per market requirements”, he added.
- The silk exchange is at the tail end of the directorate with very limited role of facilitating the regulated market process. It has a very limited influence over policy making.
- Problem of understaffing is another factor that haunts the silk exchange. In the place of two inspectors and two junior inspectors only one serve in each category. Hence, when there is an increased supply of goods the burden becomes higher with the thin staff strength.
- The market is kept open also for private buyers, but they seldom participate. This leads to a monopsony by TANSILK and at times makes the market routine mundane.
- “Since it is a monopsony the representatives of TANSILK do not bid for a higher price. It is not cost effective for us to take back the load. So we give away for the fixed price. If more lots come for sale the price quoted will be less irrespective of its quality. If we sell in private market, according to quality we can get Rs.5/ to 10/- more per kg. But, the payment may be delayed. ASE gives us an open cheque immediately, which can be encashed the next morning to use it for purchase in cocoon market, where only cash sales is executed”, say Mr.Thiyagarajan of Dharmapuri.
- “I am supplying yarns to Kanchipuram for the past 24 years. I have sold it both at ASE and private buyers. But this seems to be a safer bet,” added Mr.Thiyagarajan, an elder member of the exchange.

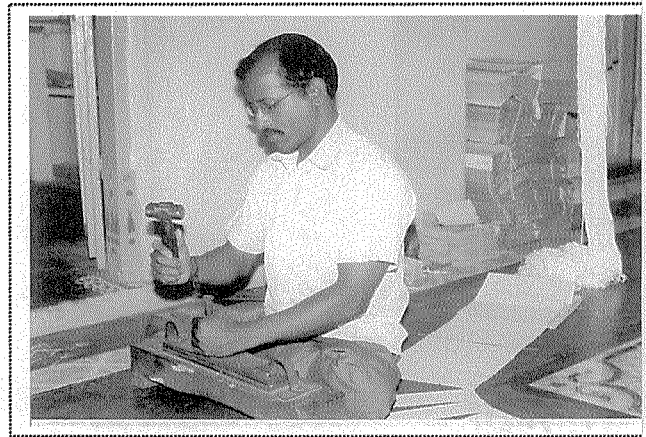
“To run a reeling unit with 5-6 reeling machines a working capital of Rs. 10,000/- to Rs. 15,000/- is required per day”, say the reelers. “But, the market is not that very promising. We get lesser margins. During winter we do not get better yield and summer is conducive for our production,” said Mr.Anguraj a reeler member from Dharmapuri.

“We come as a group hiring a vehicle with all our bags of yarn. If we come in the morning we stay here through out the day. I come here for the past 15 years to supply yarn. I also supply to private vendors. I come here once in a quarter to sell my stock. The floor price is assured here; otherwise, if the private vendors come here to participate in the auction we will be benefited. Till then we have to go by the standards determined by TANSILK”, says Mr.Rajasekar, a young member from Dharmapuri.

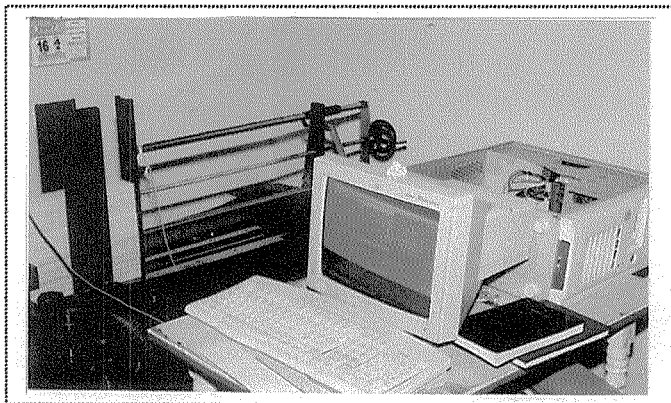
**Mr.Babu engaged in Computerised Designing**



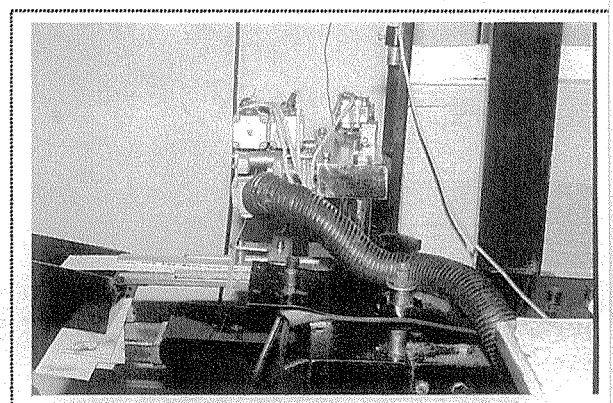
**Preparation of Design Punch Cards – Manu**



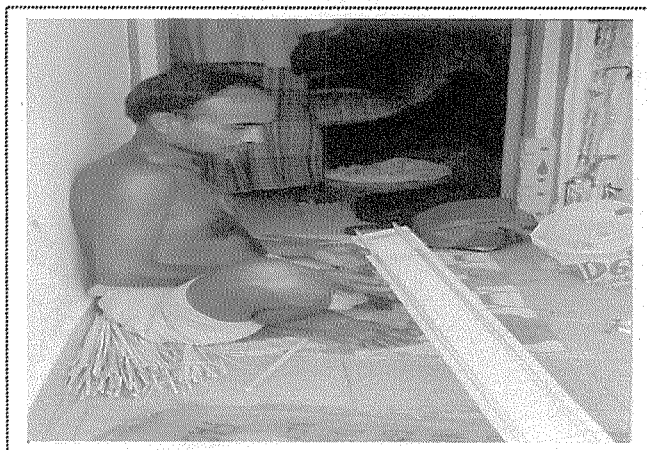
**Computerized Punching of Design cards**



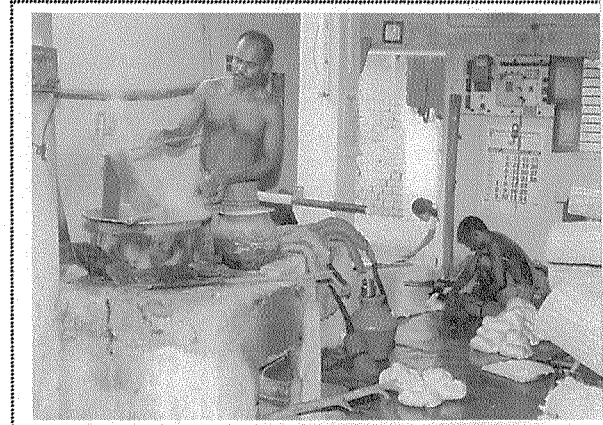
**Computerized Punching of Design cards**

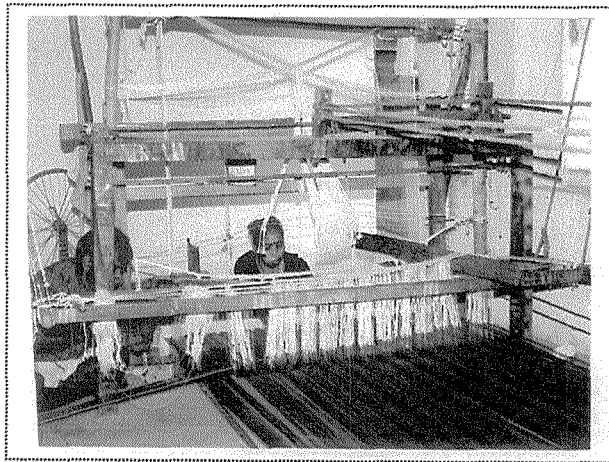


**Pannai Making**

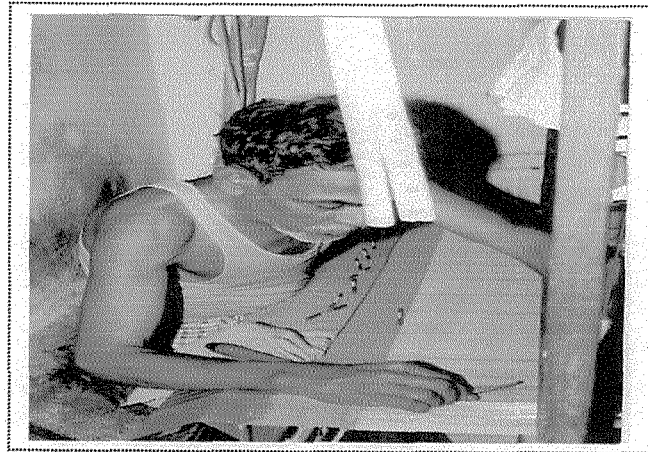


**Dyeing**



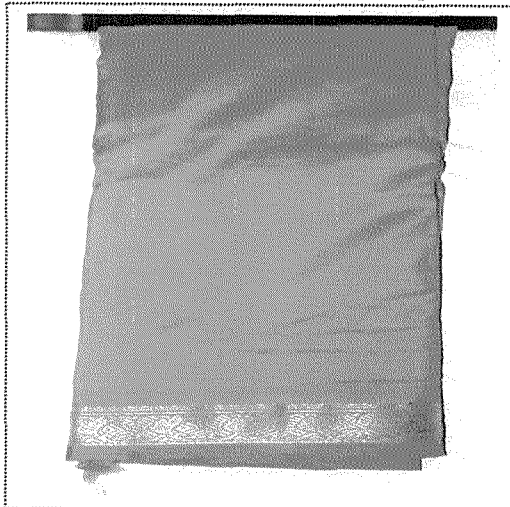


**'Adai' Technique Loom**



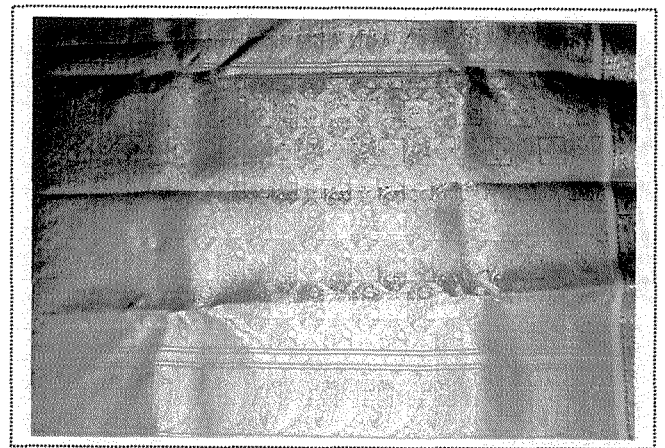
**Weaver at work**

**Saree with a simple design**

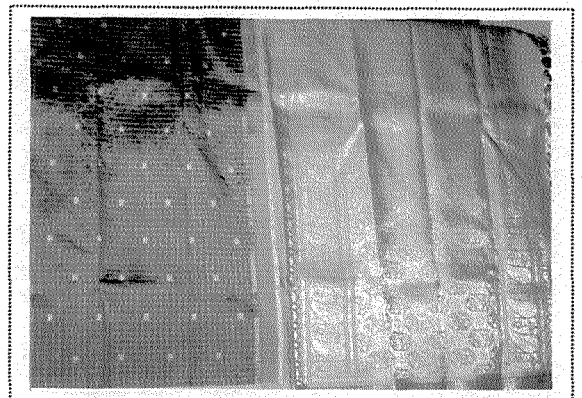
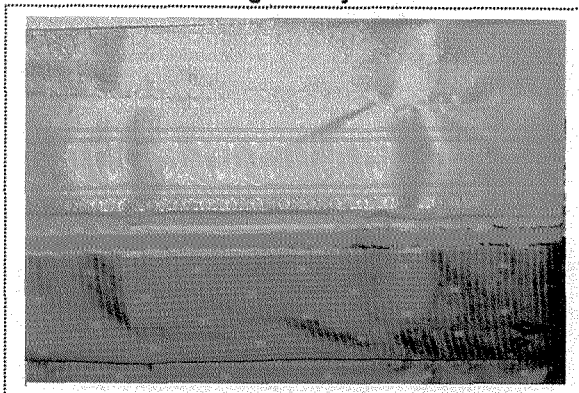


**Interlocking of body and Pallu**

**Pallu – the end piece with an elaborate design**



**The joints not visible on the front side of the saree**

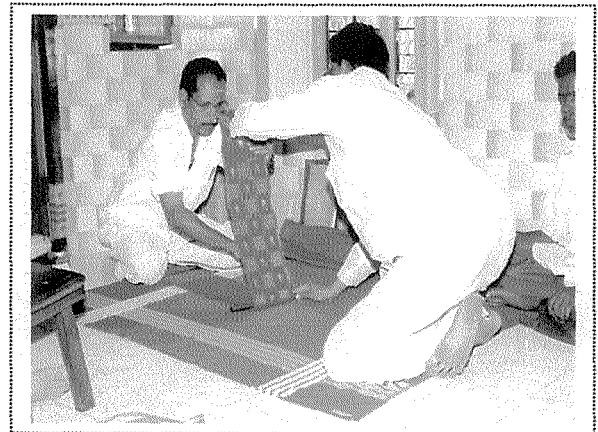




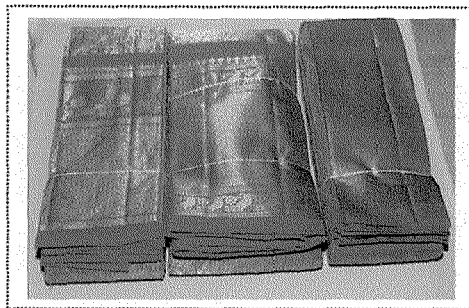
**Examination of the sari by master weaver**



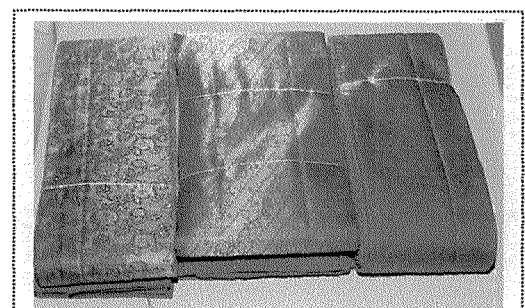
**Technical folding of the saree**



**Original product displayed along with fake ones**



**Looks are deceptive – fake goods – major problem of the cluster**



**Vantage Point Hoarding of Anna Coop Society to attract customers**



**Display of Specialities of Kanchipuram Silk for consumer awareness**

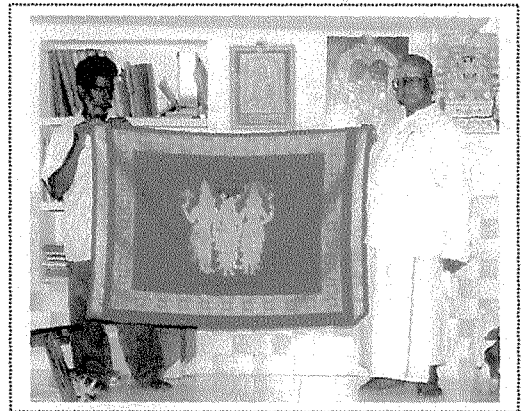




**Loom World Showroom  
Anna Silk Complex, Kanchipuram**



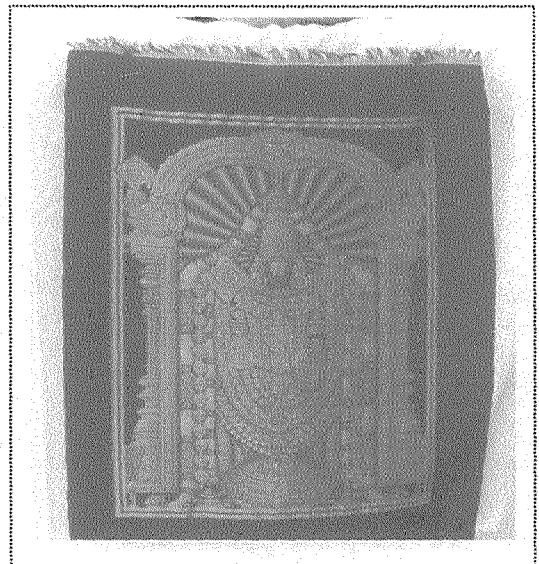
**Mr. Balasubramanian exhibiting a  
master piece featuring the divine  
marriage scene of Goddess  
Meenakshi on Kanchi Silk**



**Multilingual Calligraphy on Kanchi Silk**



**Innovative Gift Pieces on Kanchi Silk**



## QUESTIONNAIRE FOR COOPERATIVE SOCIETY WEAVERS

1. Name of the Respondent

2. Age of the respondent

3. Gender:

MALE	1	FEMALE	2
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4. Community:

BC	1	MBC	2	SC	3	GEN	4
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5. Literacy Status:

ILLITERATE	1	PRIMARY	2	MIDDLE	3	SECONDARY	4	HSC	5	GRADUATE	6	PG	7
DIPLOMA	8	OTHERS	9										

6. Type of House:

OWN	1	RENTED	2	LEASED	3
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7. House Type:

TILED	1	PUCCA	2	GROUPHOUSE	3
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8. Type of Weaver:

INDEPENDENT	1	ATTACHED TO MASTER WEAVER	2	COOPERATIVE SOCIETY MEMBER	3	BOTH 2&3	4	BOTH 1&2	5
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9. Years of Weaving:

10. No. of looms:

11. Installed capacity of looms:

12. Actual Output Per year:

13. Wages earned:

14. No. of Days Employed:

15. Type of Products produced:

SILK SAREES	1	SILK SKIRTS	2	CHUDIDHARS	3	BOTH 1&2	4
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16. No. of family members involved in the enterprise:

17. Participation in insurance scheme:

YES	1	NO	2
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18. Sources of Finance:

SOURCES	AMOUNT (Rs.)
OWN SOURCES	
COOPERATIVE	
MASTER WEAVER	
MONEYLENDER	
MICROFINANCE	

19. Sources of Raw materials:

OWN PURCHASE	1	THROUGH MASTER WEAVER	2	THROUGH COOPERATIVES	3	ALL	4
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20. Marketing Channel:

CHANNEL	1	2
DIRECT MARKETING OF GOODS	YES	No
THROUGH MASTER WEAVERS	YES	No
LOCAL TRADERS	YES	No
LARGER FIRMS	YES	No
MARKETING COOPERATIVES	YES	No
PRODUCTION COOPERATIVES	YES	No

21. Apart from orders what information do these channels provide?

INPUTS PROVIDED	1	2
PROVISION OF DESIGN INPUT	YES	No
PROVISION OF MARKET INTELLIGENCE	YES	No
PROVISION OF RAW MATERIALS	YES	No
TECHNICAL ASSISTANCE	YES	No
TRAINING INPUTS	YES	No
CREDIT FACILITIES	YES	No

22. What is the unique identity of the product that attracts the customers?

FACTOR	1	2
PRICE FACTOR	YES	No
PRODUCT QUALITY	YES	No
PRODUCT MODIFICATION AS PER CUSTOMER NEED	YES	No
RAPID DELIVERY	YES	No
ADVERTISING	YES	No

23. Have you attended formal training programmes?

YES	1	NO	2
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23.1 If yes, from

WSC	1	CSB	2	GRU	3	OTHERS	4	NONE	5
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23.2 Have you adopted the techniques taught in training? Yes 1 No 2

24. Can you please rank the problems you face in marketing?

MAJOR PROBLEMS IN MARKETING	RANK
HIGH COST OF RAWMATERIALS	
INCREASED USE OF FAKE ZARI	
BROKERS/MIDDLEMEN	
UNFAIR TRADE PRACTICES	
CHEAPER SUBSTITUTES	
LACK OF ADVERTISING	
LIMITATIONS IN PRODUCTION	

25. From where do you source your production equipments (Looms & Accessories)?

LOCAL	1	WITHIN TAMILNADU	2	OUTSIDE TAMILNADU	3	IMPORTED	4
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26. Please state the sources of repairing your production equipments?

LOCAL	1	WITHIN TAMILNADU	2	OUTSIDE TAMILNADU	3	ABROAD	4
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27. Can you please rank the problems you face in production?

PROBLEMS IN PRODUCTION	RANK
ESCALATION OF RAW MATERIAL (ZARI/YARN) COST	
NON-AVAILABILITY OF LABOUR	
INCREASED USE OF FAKE ZARI	
CLIMATIC FACTORS	
DELAY IN SUPPLY OF RAW MATERIALS	
LOW WAGES	
DELAY IN WAGE PAYMENT	
WORKING CAPITAL PROBLEMS	

28. Is there a diversification of Products?

YES	1	NO	2
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28.1 If Yes, Who supports the diversification efforts?

SKILLED EMPLOYEES	1	COOPERATIVE SOCIETY	2	OTHER WEAVERS	3	SUB CONTRACTING AGENCY	4	CUSTOMERS	5	LOCAL TECHNICAL/ R&D INSTITUTIONS	6	NOT APPLICABLE	7
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28.2 Nature of the Support for Diversification

SUPPLY OF DESIGN	1
SUPPLY OF MATERIALS	2
ADVICE ON EQUIPMENTS	3
TRAINING	4
ALL OF THE ABOVE	5
BOTH DESIGN & MATERIALS	6
NOT APPLICABLE	7

29. From where did you acquire the basic skill training?

ON THE JOB	1	FAMILY	2	TRAINING INSTITUTIONS	3
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## QUESTIONNAIRE FOR PRIVATE WEAVERS / MASTER WEAVERS

1. Name of the Respondent
2. Age of the respondent
3. Gender:

MALE	1	FEMALE	2
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4. Community:

BC	1	MBC	2	SC	3	GEN	4
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5. Literacy Status:

ILLITERATE	1	PRIMARY	2	MIDDLE	3	SECONDARY	4	HSC	5	GRADUATE	6	PG	7
DIPLOMA	8	OTHERS	9										

6. Type of House:

OWN	1	RENTED	2	LEASED	3
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7. House Type:

TILED	1	PUCCA	2	GROUPHOUSE	3
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8. Type of Weaver:

INDEPENDENT	1	ATTACHED TO MASTER WEAVER	2	BOTH 1&2	3
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INDEPENDENT	1	ATTACHED TO MASTER WEAVER	2	COOPERATIVE SOCIETY MEMBER	3	BOTH 2&3	4	BOTH 1&2	5
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MONEYLENDER	
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OWN PURCHASE	1	THROUGH MASTER WEAVER	2	BOTH	3
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20. Marketing Channel:

CHANNEL	1	2
DIRECT MARKETING OF GOODS	YES	NO
THROUGH MASTER WEAVERS	YES	NO
LOCAL TRADERS	YES	NO
LARGER FIRMS	YES	NO
MARKETING COOPERATIVES	YES	NO
THROUGH PRODUCTION COOPERATIVES	YES	NO

21. Apart from orders what information do these channels provide?

INPUTS PROVIDED	1	2
PROVISION OF DESIGN INPUT	YES	NO
PROVISION OF MARKET INTELLIGENCE	YES	NO
PROVISION OF RAWMATERIALS	YES	NO
TECHNICAL ASSISTANCE	YES	NO
TRAINING INPUTS	YES	NO
CREDIT FACILITIES	YES	NO

22. What is the unique identity of the product that attracts the customers?

FACTOR	1	2
PRICE FACTOR	YES	NO
PRODUCT QUALITY	YES	NO
PRODUCT MODIFICATION AS PER CUSTOMER NEED	YES	NO
RAPID DELIVERY	YES	NO
ADVERTISING	YES	NO

23. Have you attended formal training programmes?

YES	1	NO	2
-----	---	----	---

23.1 If yes, from

WSC	1	CSB	2	GRU	3	OTHERS	4	NONE	5
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23.2 Have you adopted the techniques taught in training? Yes 1 No 2

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INCREASED USE OF FAKE ZARI	
BROKERS/MIDDLEMEN	
UNFAIR TRADE PRACTICES	
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LACK OF ADVERTISING	

LIMITATIONS IN PRODUCTION	
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DELAY IN WAGE PAYMENT	
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28.2 Nature of the Support for Diversification

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SUPPLY OF MATERIALS	2
ADVICE ON EQUIPMENTS	3
TRAINING	4
ALL OF THE ABOVE	5
BOTH DESIGN & MATERIALS	6
NOT APPLICABLE	7

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ON THE JOB	1	FAMILY	2	TRAINING INSTITUTIONS	3
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